STATE OF CALIFORNIA

The Resources Agency

Department of Water Resources

BULLETIN No. 130-66

HYDROLOGIC DATA: 1966

Volume II: NORTHEASTERN CALIFORNIA

Appendix D: SURFACE WATER QUALITY

Appendix E: GROUND WATER QUALITY

DECEMBER 1967

RONALD REAGAN
Governor
State of California

WILLIAM R. GIANELLI
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METRIC CONVERSION TABLE

ENGLISH UNIT	EQUIVALENT METRIC UNIT	
Inch (in)	2.54	Centimeters
Foot (ft)	0.3048	Meter
Mile (mi)	1.609	Kilometers
Acre	0.405	Hectare
Square mile (sq. mi.)	2.590	Square kilometer
U. S. gallon (gal)	3.785	Liters
Acre foot (acre-ft)	1,233.5	Cubic meters
U. S. gallon per minute (gpm)	0.0631	Liters per second
Cubic feet per second (cfs)	1.7	Cubic meters per minute
Part per million (ppm)	1 milligram per liter (mg/l)	
Part per billion (ppb)	1 microgram per liter (ug/l)	
Part per trillion (ppt)	1 nanogram per liter (ng/l)	
Equivalent per million (epm)	1 milliequivalent per liter (me/l)	

BULLETIN 130-66

Volume II

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ABSTRACT

Appendixes D and E of Volume II, Bulletin 130-66, present analytical values for dissolved minerals, trace elements, miscellaneous constituents, salinity (in the Delta) and water temperatures for selected surface water quality stations, and similar information for selected wells in the Sacramento Drainage Area and the northern portion of the Lahontan Drainage Area.

APPENDIX D

SURFACE WATER QUALITY

TABLE D-1

SAMPLING STATION DATA AND INDEX

Northeastern California

Station	Station Number	Location MDB & M	Beginning[a] of Record	Frequency[b] of Sampling	Analyses on Page
American River, Middle Fork near Auburn (22b)	A7 3100.00	12N/9E-6	7-58	B	59, 96
American River at Nimbus Dam (22a)	A7 1110.00	9N/7E-16	11-58	M	58, 95, 96
American River at Sacramento (22)	A0 7140.00	8N/5E-3	4-51 9-62	M A	33, 95, 96
American River, South Fork near Lotus (22c)	A7 4150.00	11N/9E-11	7-58	B	60, 96
Antelope Creek near Mouth (88c)	A0 4520.00	26N/2W-17	10.58	M	27, 96
Antelope Creek near Red Bluff (88c)	A4 5110.50	27N/2W-8	10.58	M	48, 96
Battle Creek near Cottonwood (88b)	A4 7110.00	29N/2W-6	4-58	M	49, 96
Bear River near Wheatland (78)	A0 6550.00	13N/5E-3	12-51	M	32, 95, 96
Big Chico Creek at Chico (85a)	A0 4250.00	22N/1E-28	1-59	M	26, 96
Big Chico Creek near Chico (85)	A4 2110.00	22N/2E-9	7-52	M	46, 97
Butte Creek near Chico (84)	A4 1110.00	22N/2E-36	7-52	M	45, 97
Cache Creek near Capay (80)	A8 1120.00	10N/2W-8	12-51	M	61, 95, 97
Cache Creek near Lower Lake (42)	A8 1350.00			M	62, 97
Cache Creek, North Fork near Lower Lake (79)	A8 2050.00			M	64, 97
Calaveras River below New Hogan Dam (16c)	B2 5300.00	3N/10E-1	1-64	M	71, 97
Calaveras River above New Hogan Reservoir (16d)	B2 5898.50	4N/11E-13	1-64	M	72, 97
Calaveras River at Jenny Lind (16a)	B0 2590.00	3N/10E-27	4-51	M	68, 97
Calayeras River near Stockton (16b)	B0 2520.00	2N/6E-26	7-58	M	67, 95, 98
Clear Creek near Igo (12d)	A3 6130.00	31N/6W-27	8-58	M	44, 98
Clear Lake at Lakeport (41)	A8 1720.00			M	63, 98
Colusa Trough near Colusa (87)	A0 2976.00	16N/2W-35	7-62	M	19, 98
Cosumnes River at McConnell (94a)	B- 1125.00	6N/6E-20	7-58	B	66, 85, 98
Cosumnes River at Michigan Bar (94)	B1 1150.00	8N/8E-36	7-52	B	69, 98
Cottonwood Creek near Cottonwood (12b)	A0 3520.00	29N/3W-7	4-51	M	23, 98
Cottonwood Creek below North Fork Cottonwood Creek (11a)	A0 3540.00	29N/6W-2	8-58	M	24, 98
Cottonwood Creek, South Fork above Corrontood Creek (11b)	A0 3595.00	29N/4W-17	11-58	M	25
Cow Creek near Millville (88a)	A4 8110.00	31N/3W-32	8-58	M	50, 99
Delta Cross Channel near Walnut Grove (98)	B9 1700.00	5N/4E-35	9-52	M	76, 95, 99
Elder Creek at Gerher (95a)	A0 3320.00	25N/3W-2	1-59	M	21, 99
Elder Creek near Paskenta (13c)	A3 3110.00	25N/6W-14	10-58	M	43, 99
Feather River, Middle Fork near Merrimac (19b)	A5 5100.00	21N/6E-2	7-63	M	55, 99
Feather River at Nicolaus (20)	A0 5103.00	12N/3E-12	4-51	M	29, 95, 99
Feather River, North Fork at Big Bar (19a)	A5 3140.00	23N/5E-32	7-63	M	53, 99
Feather River near Oroville (19)	A5 1140.00	19N/4E-2	4-51	M	51, 95, 99
Feather River below Shanghai Bend (20a)	A0 5120.00	14N/3E-11	7-58	M	30, 100
Feather River at Sutter Butte Canal, near Gridley	A0 5277	19N/3E-33	7-56	Continuous	118
Feather River, South Fork below Pondercsa Dam (19c)	A5 6080.00	20N/6E-33	7-56	M	56, 100
Feather River, West Branch, near Yankee Hill (19d)	A5 2100.00		10-64	M	52, 100
Feather River, at Yuba City	A0 5135.00	15N/3E-23	7-64	Continuous	117
Grant Line Canal at Tracy Road Bridge (103a)	B9 5300.00	1S/5E-29	7-58	M	82, 100
Indian Creek near Crescent Mills (17d)	A5 4320.00	26N/9E-25	4-51	B	54, 100
Indian Slough near Brentwood (107)	B9 5279.80	1N/3E-23	9-52	M	100

a Beginning of record

b M-Monthly, B - Bimonthly, Q - Quarterly, S - Semiannually, A - Annually, I - Irregular

SURFACE WATER QUALITY
SAMPLING STATIONS
CENTRAL VALLEY REGION (NO. 5)

Station No.	Station Name
A0 2105	Sacramento River at Sacramento Weir
A0 2170	Sacramento River at Fremont Weir, West End
A0 2420.00	Sacramento River at Colusa (13b)
A0 2430.02	Sacramento River above Colusa Basin Drain (14b)
A0 2500.00	Sacramento River at Butte City (87a)
A0 2630.00	Sacramento River at Hamilton City(13)
A0 2785.00	Sacramento River at Bend (12c)
A0 2925.00	Sacramento Slough near Knights Landing (14a)
A0 2976.00	Colusa Basin Drain near Colusa (87)
A0 3200.00	Thomes Creek near Mough (95b)
A0 3320.00	Elder Creek at Gerber (95a)
A0 3460.00	Red Bank Creek near Red Bluff(88d)
A0 3520.00	Cottonwood Creek near Cottonwood(12b)
A0 3540.00	Cottonwood Creek below North Fork Cottonwood Creek (11a)
A0 3595.00	Cottonwood Creek, South Fork above Cottonwood Creek (11b)
A0 4250.00	Big Chico Creek at Chico (85a)
A0 4520.00	Antelope Creek near Mouth (88c)
A0 4620.00	Paynes Creek near Red Bluff (88g)
A0 5103.00	Feather River at Nicolaus (20)
A0 5120.00	Feather River below Shanghai Bend (20a)
A0 5135.00	Feather River at Yuba City
A0 6120.00	Yuba River at Marysville (21)
A0 6550.00	Bear River near Wheatland (75)
A0 7140.00	American River at Sacramento (22)
A1 1020.00	Pit River near Montgomery Creek (17)
A1 1680.00	Pit River near Canby (17a)
A1 4400.00	Pit River, South Fork near Likely (18a)
A2 1010.00	Sacramento River at Keswick (12)
A2 1300.00	Sacramento River at Delta (11)
A2 2150.00	McCloud River above Shasta Lake (18)
A3 1110.00	Stony Creek below Black Butte Dam (13c)
A3 1250.00	Stony Creek near Fruto (13f)
A3 2120.00	Thomes Creek at Paskenta (13d)
A3 3110.00	Elder Creek near Paskenta (13e)
A3 6130.00	Clear Creek near Igo (12d)
A4 1110.00	Butte Creek near Chico (84)
A4 2110.00	Big Chico Creek near Chico (85)
A4 4410.00	Mill Creek near Mouth (86)
A4 5110.50	Antelope Creek near Red Bluff(88e)
A4 7110.00	Rattle Creek near Cottonwood(88b)
A4 8110.00	Cow Creek near Millville (88a)
A5 1140.00	Feather River near Oroville(19)
A5 2100.00	Feather River, West Branch near Yankee Hill (19d)
A5 3140.00	Feather River, North Fork at Big Bar (19a)
A5 4320.00	Indian Creek near Crescent Mills (17d)
A5 5100.00	Feather River, Middle Fork near Merrimac (19b)
A5 6080.00	Feather River, South Fork below Ponderosa Dam (19c)
A6 1100.00	Yuba River near Smartsville(21a)
A7 1110.00	American River at Nimbus Dam (22a)
A7 3100.00	American River, Middle Fork near Auburn (22b)
A7 4150.00	American River, South Fork near Lotus (22c)
A8 1120.00	Cache Creek near Capay (80)
A8 1350.00	Cache Creek near Lower Lake(42)
A8 1720.00	Clear Lake at Lakeport (41)
A8 2050.00	Cache Creek, North Fork near Lower Lake (79)
A9 1250.00	Putah Creek near Winters (81)
B0 1125.00	Consumnes River at McConnell (94a)
B0 2520.00	Calaveras River at Stockton (16b)
B0 2590.00	Calaveras River at Jenny Lind (16a)
B1 1150.00	Consumnes at Michigan Bar(94)
B2 1170.00	Mokelumne River below Comanche Dam(23a)
B2 5300.00	Calaveras River below New Hogan Dam (16c)
B2 5898.50	Calaveras River above New Hogan Reservoir (16d)
B9 1210.00	Sacramento River at Rio Vista (16)
B9 1260.00	Lindsey Slough near Rio Vista (110)
B9 1700	Sacramento River at Walnut Grove
B9 1700.00	Delta Cross Channel near Walnut Grove (98)
B9 1849.90	Sacramento River at Freeport (15b)
B9 4120.10	Little Potato Slough at Terminous (99)
B9 4300.00	Mokelumne River at Woodbridge (23)
B9 5020.00	San Joaquin River at Antioch (28)
B9 5110.20	Old River at Mandeville Island (112)
B9 5220.00	Rock Slough near Knightsen (109)
B9 5270.20	Italian Slough near Mouth(106)
B9 5279.80	Indian Slough near Brentwood (107)
B9 5300.00	Grant Line Canal at Tracy Road Bridge (103a)
B9 5320.20	Old River at Orwood Bridge(108)
B9 5340.00	Old River at Clifton Court Ferry (104)
B9 5380.00	Old River near Tracy (103)
B9 5620	San Joaquin River at Rindge Pump
B9 5620.00	Stockton Ship Channel on Rindge Island (100)
B9 5710.00	San Joaquin River at Garwood Bridge (101)
B9 5820.00	San Joaquin River at Mossdale Bridge (102)

LAHONTAN REGION (No. 6)

G4 1600.00	Susan River at Susanville(17b)
G7 1195.00	Truckee River at Farad (53)
G7 1600.50	Truckee River near Truckee(52)
G7 1710.00	Lake Tahoe at Tahoe City(38)
G8 2300.00	Carson River, West Fork at Woodfords (115a)
G8 3420.00	Carson River, East Fork near Markleeville (115)
G9 2400.00	Walker River, West near Coleville (116)
G9 3200.00	Walker River, East near Bridgeport (116a)

FIGURE D-1

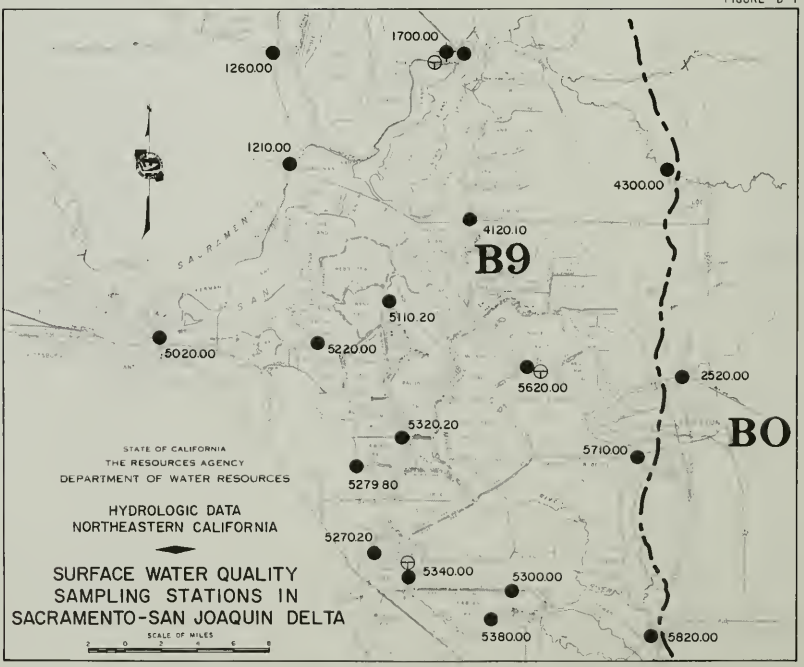
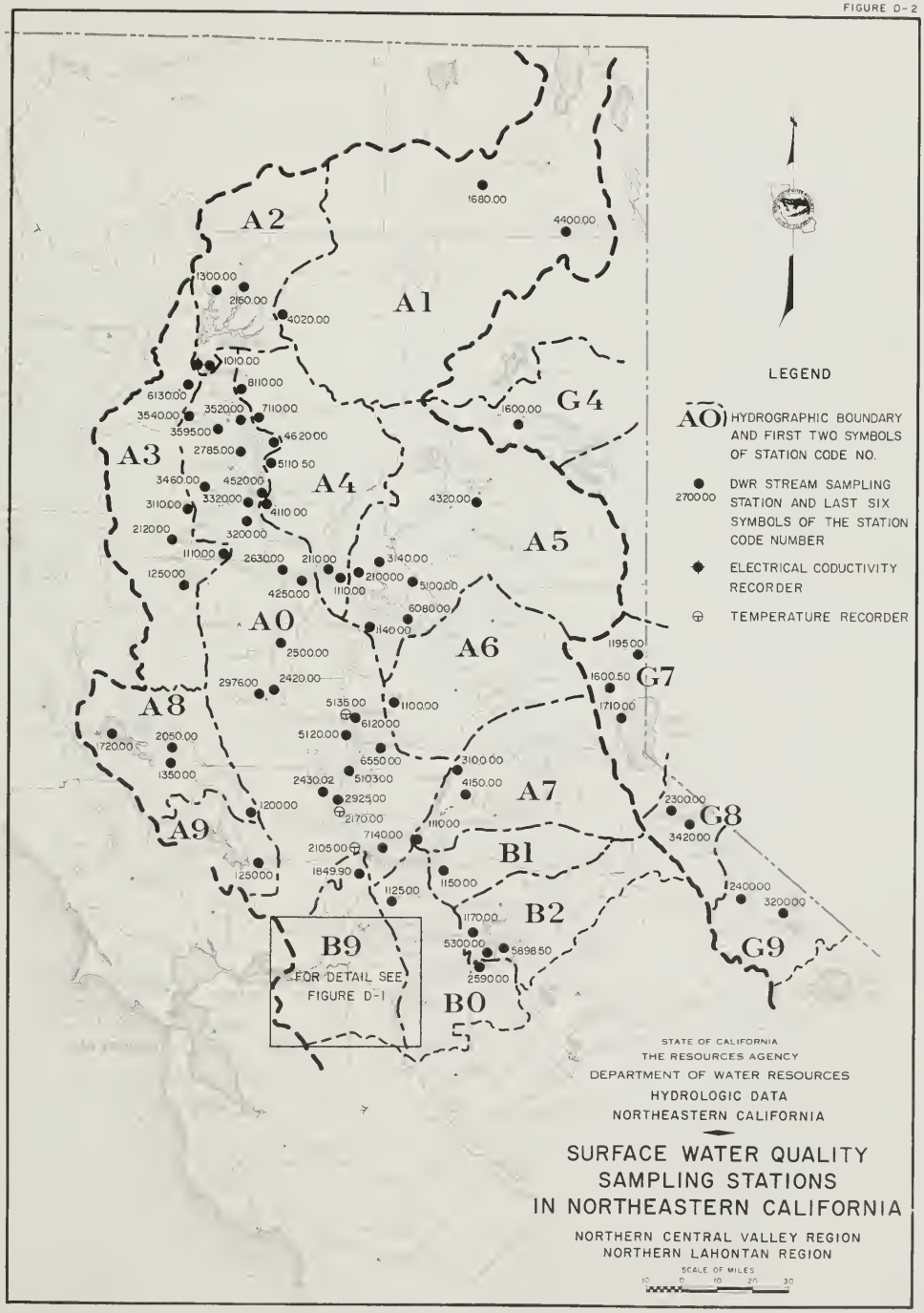


FIGURE D-2



STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
HYDROLOGIC DATA
NORTHEASTERN CALIFORNIA

SURFACE WATER QUALITY SAMPLING STATIONS IN NORTHEASTERN CALIFORNIA

NORTHERN CENTRAL VALLEY REGION
NORTHERN LAHONTAN REGION

SCALE OF MILES
10 0 10 20 30

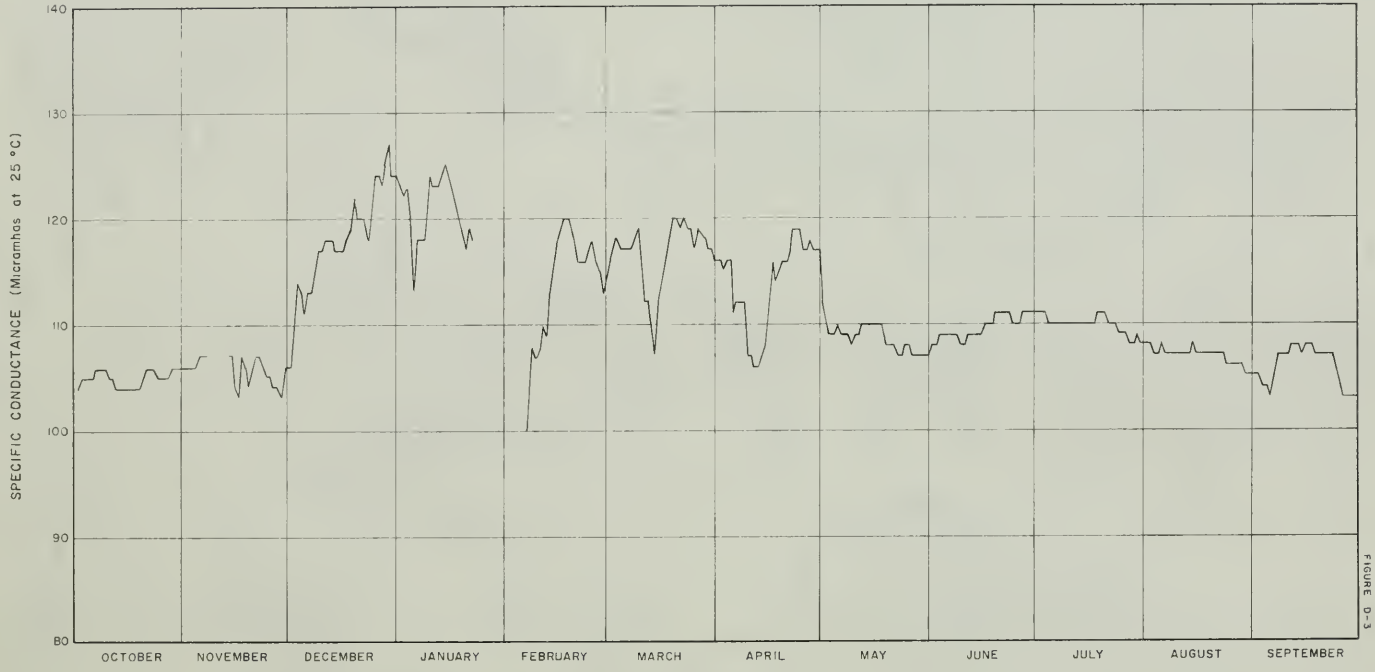


FIGURE D-3

AVERAGE DAILY SPECIFIC CONDUCTANCE - SACRAMENTO RIVER AT KESWICK DAM (STA. A2 1010.00)

OCTOBER 1965 THROUGH SEPTEMBER 1966

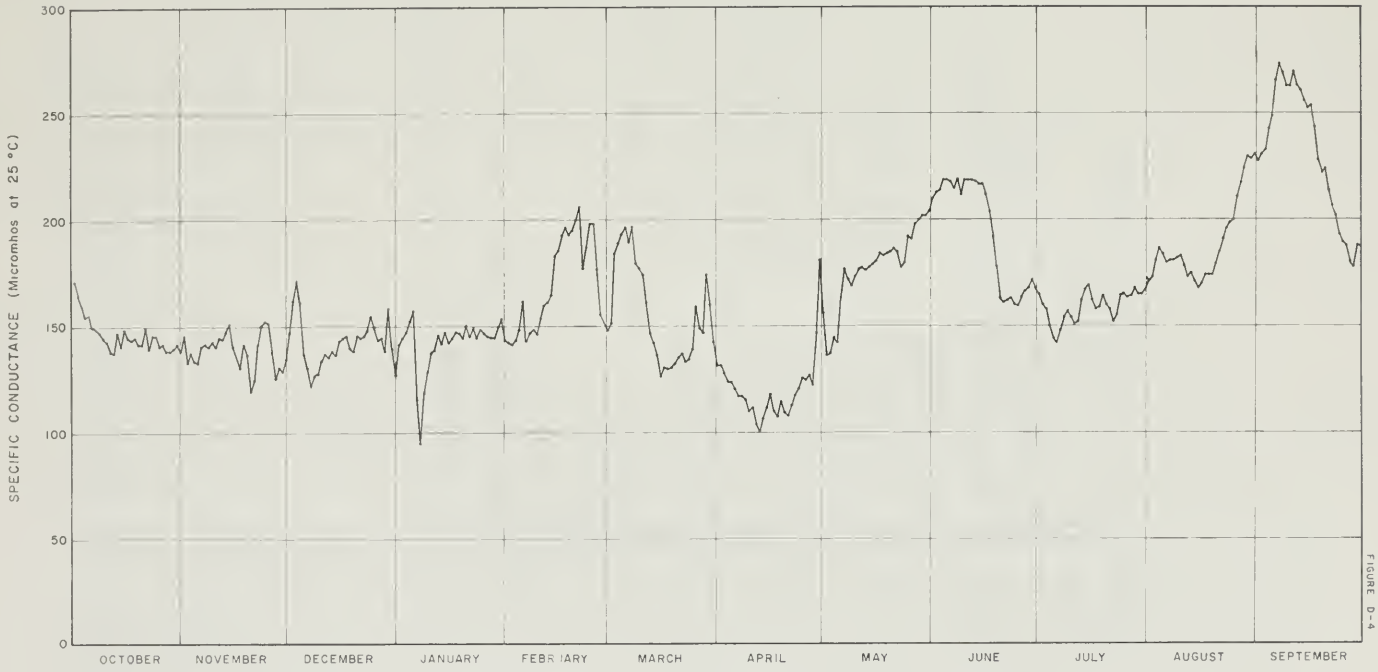


FIGURE D-4

AVERAGE DAILY SPECIFIC CONDUCTANCE – SACRAMENTO RIVER AT WALNUT GROVE (STA B9 1650.10)

OCTOBER 1965 THROUGH SEPTEMBER 1966

Table D 2

An explanation of column headings follows:

Lab - 5000 U. S. Geological Survey

5050 Department of Water Resources

G.H. - The instaneous gage height in feet above an established datum.

Q - The instantaneous discharge measured in cubic feet per second (cfs).

DO - The dissolved oxygen content in milligrams per liter is listed first and is followed by the percent saturation.

EC - The specific conductance in micromhos at 25° Centigrade.

TDS - Gravimetric determination of total dissolved solids in milligrams per liter.

SUM - Determined by addition of analyzed constituents.

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
SACRAMENTO RIVER AT COLUSA (13b)																				
A02420.00		43.28	10.2	63 F	8.1	125	--	--	6.0	--	0.0	66	--	2.3	--	--	0.0	--	--	49
10/06/65	5000	4060	105		7.4				.26			1.08		.06						0
0945	5050																			
A02420.00		43.24	10.1	60 F	7.9	128	--	--	6.6	--	0.0	67	--	2.7	2.0	--	0.1	--	--	51
11/03/65	5000	8220	101		7.4				.29			1.10		.08	.03					0
1115	5050																			
A02420.00		45.41	10.6	51 F	8.2	145	--	--	7.3	--	0.0	71	--	4.1	--	--	0.0	--	--	58
12/01/65	5000	10700	95		7.3				.32			1.16		.12						0
1045	5050																			
A02420.00		55.08	11.8	48 F	7.8	139	--	--	7.3	--	0.0	69	--	3.0	--	--	0.0	--	--	53
01/05/66	5000	23400	102		7.3				.32			1.13		.08						0
1100	5050																			
A02420.00		58.88	11.5	47 F	8.2	146	--	--	7.1	--	0.0	66	--	5.1	--	--	0.1	--	--	57
02/09/66	5000	28200	98		7.4				.31			1.08		.14						3
0930	5050																			
A02420.00		45.03	11.3	53 F	7.6	171	--	--	8.4	--	0.0	81	--	3.3	--	--	0.1	--	--	67
03/09/66	5000	9710	104		7.4				.37			1.33		.09						1
1100	5050																			
A02420.00		44.09	9.7	61 F	7.9	150	--	--	7.1	--	0.0	74	--	4.0	--	--	0.0	--	--	60
04/07/66	5000	8610	98		7.4				.31			1.21		.11						0
0900	5050																			
A02420.00		43.32	9.0	60 F	7.9	135	12	5.8	7.1	1.3	0.0	71	7.0	2.3	0.7	--	0.0	19	89	54
05/05/66	5000	7920	90		7.3		.60	.48	.31	.03		1.16	.15	.06	.01				90	0
0915	5050						42	34	22	2		84	11	4	1					
A02420.00		43.50	9.7	65 F	8.0	134	--	--	6.9	--	0.0	70	--	2.8	--	--	0.0	--	--	53
06/09/66	5000	7980	102		7.8				.30			1.15		.08						0
1145	5050																			
A02420.00		45.54	10.0	62 F	8.1	121	--	--	6.5	--	0.0	64	--	2.3	--	--	0.0	--	--	48
07/13/66	5000	10200	102		7.7				.28			1.05		.06						0
1310	5050																			
A02420.00		45.00	9.8	64 F	8.0	123	--	--	6.2	--	0.0	66	--	2.1	--	--	0.0	--	--	49
08/11/66	5000	9980	102		7.4				.27			1.08		.06						0
0820	5050																			
A02420.00		42.55	10.0	62 F	8.1	129	11	6.0	6.5	1.1	0.0	69	7.0	2.8	1.0	--	0.0	20	81	52
09/14/66	5000	7230	102		7.5		.55	.49	.28	.03		1.13	.15	.08	.02				89	0
1120	5050						41	36	21	2		82	11	6	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / PH FLD	EC LAB / EC FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE — CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
SACRAMENTO RIVER ABOVE COLUSA TROUGH (14b)																				
A02430.02		19.30	9.9	60 F	8.2	135	--	--	6.7	--	0.0	71	--	2.9	--	--	0.0	--	--	54
10/06/65	5000	8770	99		7.4				.29			1.16		.08						0
0830	5050																			
A02430.02		19.62	10.1	56 F	8.2	126	--	--	6.1	--	0.0	67	--	2.4	--	--	0.1	--	--	51
11/03/65	5000	8770	96		7.4				.27			1.10		.07						0
1000	5050																			
A02430.02		24.09	10.8	50 F	8.2	126	--	--	6.0	--	0.0	62	--	2.9	--	--	0.0	--	--	50
12/01/65	5000	13600	95		7.3				.26			1.02		.08						0
0930	5050																			
A02430.02		25.59	11.0	46 F	8.1	150	--	--	8.0	--	0.0	73	--	3.7	--	--	0.0	--	--	54
01/05/66	5000	16400	92		7.3				.35			1.20		.10						0
0925	5050																			
A02430.02		32.88	11.7	48 F	8.2	163	--	--	8.8	--	0.0	72	--	5.2	--	--	0.1	--	--	60
02/08/66	5000	25800	97		7.4				.38			1.18		.17						1
0825	5050																			
A02430.02		21.51	11.3	53 F	8.1	177	--	--	8.6	--	0.0	83	--	3.6	--	--	0.1	--	--	70
03/09/66	5000	9730	104		7.4				.37			1.36		.10						2
1315	5050																			
A02430.02		23.11	9.3	62 F	8.2	148	--	--	6.8	--	0.0	74	--	3.6	--	--	0.0	--	--	58
04/07/66	5000	9570	95		7.3				.30			1.21		.10						0
1045	5050																			
A02430.02		18.80	8.4	64 F	7.8	190	14	7.5	13	1.1	0.0	84	17	4.5	0.9	--	0.0	20	124	66
05/05/66	5000	6730	88		7.3		.70	.62	.57	.03		1.38	.35	.18	.01				121	0
1045	5050						36	32	30	2		72	18	9	1					
A02430.02		19.53	9.4	64 F	8.2	178	--	--	12	--	0.0	82	--	6.0	--	--	0.1	--	--	63
06/08/66	5000	8260	98		7.4				.52			1.34		.17						0
0700	5050																			
A02430.02		19.45	9.9	68 F	8.1	137	--	--	8.1	--	0.0	69	--	3.1	--	--	0.0	--	--	52
07/13/66	5000	9890	108		7.7				.35			1.13		.09						0
1505	5050																			
A02430.02		19.52	9.6	67 F	8.1	142	--	--	8.4	--	0.0	72	--	3.2	--	--	0.0	--	--	53
08/11/66	5000	9940	104		7.5				.37			1.18		.09						0
1020	5050																			
A02430.02		18.67	9.8	67 F	7.8	167	13	8.0	10	1.1	0.0	85	9.0	4.2	0.7	--	0.0	20	104	66
09/14/66	5000	8840	106		7.8		.65	.66	.44	.03		1.39	.19	.12	.01				108	0
1230	5050						37	37	25	2		81	11	7	1					

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIFQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER TDS SUM	TH NCH
SACRAMENTO RIVER AT BUTTE CITY (87a)																				
A02500.00		71.11	10.4	44 F	8.2	128	--	--	6.2	--	0.0	67	--	2.2	--	--	0.0	--	--	42
10/06/65	5000	8280	108		7.5				.27			1.10		.06						0
1145	5050																			
A02500.00		71.03	10.4	59 F	8.1	128	--	--	6.5	--	0.0	66	--	2.0	--	--	0.0	--	--	50
11/03/65	5000	8090	102		7.4				.28			1.08		.06						0
1315	5050																			
A02500.00		71.88	10.9	53 F	8.2	146	--	--	7.1	--	0.0	70	--	4.2	--	--	0.0	--	--	58
12/01/65	5000	9770	100		7.3				.31			1.15		.12						1
1230	5050																			
A02500.00		83.79	11.5	48 F	7.6	110	--	--	7.0	--	0.0	52	--	2.2	--	--	0.1	--	--	46
01/05/66	5000	66500	99		7.4				.30			.85		.06						4
1320	5050																			
A02500.00		77.13	11.4	48 F	8.2	150	--	--	7.2	--	0.0	70	--	4.2	--	--	0.1	--	--	60
02/08/66	5000	23800	98		7.3				.31			1.15		.12						3
1115	5050																			
A02500.00		71.93	11.4	52 F	8.0	167	--	--	8.1	--	0.0	79	--	3.1	--	--	0.1	--	--	65
03/09/66	5000	9920	103		7.4				.35			1.30		.09						0
0915	5050																			
A02500.00		71.29	9.9	54 F	8.0	148	--	--	7.1	--	0.0	73	--	3.2	--	--	0.0	--	--	59
04/07/66	5000	8240	98		7.3				.31			1.20		.09						0
0825	5050																			
A02500.00		71.21	9.7	58 F	7.8	135	12	5.8	6.5	0.9	0.0	70	8.0	2.8	0.6	--	0.0	20	99	54
05/05/66	5000	8480	94		7.4		.60	.48	.28	.02		1.15	.17	.08	.01				91	0
0825	5050						43	35	20	1		82	12	6	1					
A02500.00		71.25	10.6	63 F	8.0	131	--	--	6.7	--	0.0	69	--	2.5	--	--	0.0	--	--	53
06/08/66	5000	9000	109		7.3				.29			1.13		.07						0
1000	5050																			
A02500.00		72.43	10.0	62 F	7.6	122	--	--	6.1	--	0.0	62	--	2.0	--	--	0.0	--	--	48
07/13/66	5000	11300	102		7.4				.27			1.02		.06						0
1210	5050																			
A02500.00		71.99	10.0	62 F	7.8	121	--	--	6.3	--	0.0	64	--	2.1	--	--	0.0	--	--	49
08/11/66	5000	10300	102		7.6				.27			1.05		.06						0
0730	5050																			
A02500.00		70.50	10.3	60 F	7.9	128	10	6.0	6.2	1.0	0.0	68	6.0	2.4	1.4	--	0.0	19	87	50
09/14/66	5000	6960	103		7.4		.50	.49	.27	.03		1.12	.12	.07	.02				85	0
1000	5050						39	38	21	2		84	9	5	2					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / PH FLD	EC LAB / EC FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TOS SUM	TH NCH
SACRAMENTO RIVER ABOVE COLUSA TROUGH (14b)																				
A02430.02		19.30	9.9	60 F	8.2	135	--	--	6.7	--	0.0	71	--	2.9	--	--	0.0	--	--	54
10/06/65	5000	8770	99		7.4				.29			1.16		.08						0
0830	5050																			
A02430.02		19.62	10.1	56 F	8.2	126	--	--	6.1	--	0.0	67	--	2.4	--	--	0.1	--	--	51
11/03/65	5000	8770	96		7.4				.27			1.10		.07						0
1000	5050																			
A02430.02		24.09	10.8	50 F	8.2	126	--	--	6.0	--	0.0	62	--	2.9	--	--	0.0	--	--	50
12/01/65	5000	13600	95		7.3				.26			1.02		.08						0
0930	5050																			
A02430.02		25.59	11.0	46 F	8.1	150	--	--	8.0	--	0.0	73	--	3.7	--	--	0.0	--	--	54
01/05/66	5000	16400	92		7.3				.35			1.20		.10						0
0925	5050																			
A02430.02		32.98	11.3	48 F	8.2	163	--	--	8.8	--	0.0	72	--	3.2	--	--	0.1	--	--	60
02/08/66	5000	25800	97		7.4				.38			1.18		.17						1
0825	5050																			
A02430.02		21.51	11.3	53 F	8.1	177	--	--	8.6	--	0.0	83	--	3.6	--	--	0.1	--	--	70
03/09/66	5000	9730	104		7.4				.37			1.36		.10						2
1315	5050																			
A02430.02		23.11	9.3	62 F	8.2	148	--	--	6.8	--	0.0	74	--	3.6	--	--	0.0	--	--	58
04/07/66	5000	9570	95		7.3				.30			1.21		.10						0
1045	5050																			
A02430.02		18.80	8.4	64 F	7.8	190	14	7.5	13	1.1	0.0	84	17	6.5	0.9	--	0.0	20	124	66
05/05/66	5000	6730	88		7.3		.70	.62	.57	.03		1.38	.35	.18	.01				121	0
1045	5050						36	32	30	2		72	18	9	1					
A02430.02		18.53	9.4	64 F	8.2	178	--	--	12	--	0.0	82	--	6.0	--	--	0.1	--	--	63
06/08/66	5000	8260	98		7.4				.52			1.34		.17						0
0700	5050																			
A02430.02		19.45	9.9	68 F	8.1	137	--	--	8.1	--	0.0	69	--	3.1	--	--	0.0	--	--	52
07/13/66	5000	9890	108		7.7				.35			1.13		.09						0
1505	5050																			
A02430.02		19.52	9.6	67 F	8.1	142	--	--	8.4	--	0.0	72	--	3.2	--	--	0.0	--	--	53
08/11/66	5000	9940	104		7.5				.37			1.18		.09						0
1020	5050																			
A02430.02		18.67	9.8	67 F	7.8	167	13	8.0	10	1.1	0.0	85	9.0	4.2	0.7	--	0.0	20	104	66
09/14/66	5000	8840	106		7.8		.65	.66	.44	.03		1.39	.19	.12	.01				108	0
1230	5050						37	37	25	2		81	11	7	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
SACRAMENTO RIVER AT BUTTE CITY (87a)																				
A02500.00 10/06/65 1145	5000 5050	71.11 8280	10.4 108	64 F	8.2 7.5	128	-- -- --	-- -- --	6.2 .27 --	--	0.0	67 1.10 --	--	2.2 .06 --	--	--	0.0	--	--	42 0
A02500.00 11/03/65 1315	5000 5050	71.03 8090	10.4 102	59 F	8.1 7.4	128	-- -- --	-- -- --	6.5 .28 --	--	0.0	66 1.08 --	--	2.0 .06 --	--	--	0.0	--	--	50 0
A02500.00 12/01/65 1230	5000 5050	71.88 9770	10.9 100	53 F	8.2 7.3	146	-- -- --	-- -- --	7.1 .31 --	--	0.0	70 1.15 --	--	4.2 .12 --	--	--	0.0	--	--	58 1
A02500.00 01/05/66 1320	5000 5050	83.79 44500	11.5 99	48 F	7.6 7.4	110	-- -- --	-- -- --	7.0 .30 --	--	0.0	52 .85 --	--	2.2 .06 --	--	--	0.1	--	--	46 4
A02500.00 02/08/66 1115	5000 5050	77.13 23800	11.4 98	48 F	8.2 7.3	150	-- -- --	-- -- --	7.2 .31 --	--	0.0	70 1.15 --	--	4.2 .12 --	--	--	0.1	--	--	60 3
A02500.00 03/09/66 0915	5000 5050	71.93 9920	11.4 103	52 F	8.0 7.4	167	-- -- --	-- -- --	8.1 .35 --	--	0.0	79 1.30 --	--	3.1 .09 --	--	--	0.1	--	--	65 0
A02500.00 04/07/66 0825	5000 5050	71.29 8240	9.9 98	54 F	8.0 7.3	148	-- -- --	-- -- --	7.1 .31 --	--	0.0	73 1.20 --	--	3.2 .09 --	--	--	0.0	--	--	59 0
A02500.00 05/05/66 0825	5000 5050	71.21 8480	9.7 94	58 F	7.8 7.4	135	12 .60 43	5.8 .48 35	6.3 .28 20	0.9 .02 1	0.0	70 1.15 82	8.0 .17 12	2.8 .08 6	0.6 .01 1	--	0.0	20	99 91	54 0
A02500.00 06/08/66 1000	5000 5050	71.25 9000	10.6 109	63 F	8.0 7.3	131	-- -- --	-- -- --	6.7 .29 --	--	0.0	69 1.13 --	--	2.5 .07 --	--	--	0.0	--	--	53 0
A02500.00 07/13/66 1210	5000 5050	72.43 11300	10.0 102	62 F	7.6 7.4	122	-- -- --	-- -- --	6.1 .27 --	--	0.0	62 1.02 --	--	2.0 .06 --	--	--	0.0	--	--	48 0
A02500.00 08/11/66 0730	5000 5050	71.99 10300	10.0 102	62 F	7.8 7.6	121	-- -- --	-- -- --	6.3 .27 --	--	0.0	64 1.05 --	--	2.1 .06 --	--	--	0.0	--	--	49 0
A02500.00 09/14/66 1000	5000 5050	70.50 6960	10.3 103	60 F	7.9 7.4	128	10 .50 39	5.0 .49 38	6.2 .27 21	1.0 .03 2	0.0	68 1.12 84	6.0 .12 9	2.4 .07 5	1.4 .02 2	--	0.0	19	87 85	50 0

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
SACRAMENTO RIVER NEAR HAMILTON CITY (13)																				
A02630.00		28.47	10.4	58 F	8.1	122	--	--	6.4	--	0.0	64	--	2.5	--	--	0.0	--	--	48
10/06/65	5000	7836	101		7.4				.28			1.05		.07						0
1255	5050																			
A02630.00		28.47	10.4	55 F	7.9	124	--	--	6.7	--	0.0	66	--	2.8	--	--	0.0	--	--	49
11/03/65	5000	8096	98		7.3				.29			1.08		.08						0
1420	5050																			
A02630.00		28.49	10.7	52 F	8.2	138	--	--	6.8	--	0.0	69	--	4.0	--	--	0.0	--	--	54
12/01/65	5000	7779	97		7.3				.30			1.13		.11						0
1340	5050																			
A02630.00		44.45	11.5	46 F	7.3	82	--	--	3.6	--	0.0	45	--	1.5	--	--	0.0	--	--	33
01/05/66	5000	77290	96		7.2				.16			.74		.04						0
1420	5050																			
A02630.00		31.06	11.6	46 F	8.0	130	--	--	6.5	--	0.0	63	--	3.0	--	--	0.1	--	--	51
02/08/66	5000	12320	97		7.3				.28			1.03		.08						0
1230	5050																			
A02630.00		28.94	11.5	51 F	8.1	161	--	--	8.0	--	0.0	74	--	3.3	--	--	0.0	--	--	63
03/08/66	5000	8747	103		7.4				.35			1.21		.09						3
1330	5050																			
A02630.00		28.71	10.0	59 F	8.2	138	--	--	6.6	--	0.0	69	--	3.2	--	--	0.1	--	--	55
04/04/66	5000	7495	99		7.1				.29			1.13		.09						0
1310	5050																			
A02630.00		29.75	10.2	57 F	8.0	128	12	5.1	6.5	1.0	0.0	67	7.0	2.0	0.6	--	0.0	19	87	51
05/04/66	5000	10990	98		7.4		.60	.42	.28	.03		1.10	.15	.06	.01				86	0
1120	5050						45	32	21	2		83	11	5	1					
A02630.00		28.87	10.4	59 F	7.7	127	--	--	6.6	--	0.0	64	--	2.4	--	--	0.0	--	--	50
06/09/66	5000	8537	102		7.6				.29			1.05		.07						0
1020	5050																			
A02630.00		29.80	10.9	66 F	8.2	118	--	--	6.2	--	0.0	63	--	2.1	--	--	0.0	--	--	46
07/11/66	5000	11770	116		7.5				.27			1.03		.06						0
0920	5050																			
A02630.00		29.40	10.4	58 F	8.1	117	--	--	5.9	--	0.0	63	--	2.0	--	--	0.0	--	--	46
08/10/66	5000	10500	99						.26			1.03		.06						0
1110	5050																			
A02630.00		28.26	10.0	54 F	7.9	121	9.7	5.5	6.1	1.0	0.0	65	5.0	1.8	0.9	--	0.0	20	76	46
09/14/66	5000	6915	97		7.4		.48	.45	.27	.03		1.07	.10	.05	.01				82	0
0730	5050						39	37	22	2		87	8	4	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB SAMPLER	G.H. Q	DO SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
SACRAMENTO RIVER AT BEND (12c)																				
A027R5.00		2.83	10.3	53 F	8.0	114	--	--	5.7	--	0.0	61	--	1.4	--	--	0.0	--	--	45
10/04/65	5000	R320	95		7.3				.25			1.00		.04						0
0900	5050																			
A027R5.00		2.93	10.3	52 F	8.1	118	--	--	6.1	--	0.0	66	--	2.0	2.0	--	0.0	--	--	48
11/01/65	5000	R730	94		7.3				.27			1.08		.06	.03					0
0930	5050																			
A027R5.00		3.96	10.8	50 F	7.9	117	--	--	5.6	--	0.0	61	5.0	2.4	--	--	0.0	--	--	47
11/29/65	5000	12000	96		7.2				.24			1.00	.10	.07						0
0920	5050																			
A027R5.00			11.9	48 F	8.1	133	--	--	7.4	--	0.0	67	--	2.6	0.7	--	0.0	--	--	49
01/03/66	5000	13700	103		7.3				.32			1.10		.07	.01					0
0920	5050																			
A027R5.00			11.7	45 F	7.9	113	--	--	5.4	--	0.0	53	--	2.3	0.9	--	0.0	--	--	44
02/07/66	5000	15900	98		7.2				.23			.87		.06	.01					1
0910	5050																			
A027R5.00			11.6	49 F	7.8	141	--	--	7.3	--	0.0	64	--	2.0	0.6	--	0.0	--	--	55
03/08/66	5000	R160	102		7.2				.32			1.05		.06	.01					3
1030	5050																			
A027R5.00			10.8	54 F	8.2	130	--	--	6.6	--	0.0	67	--	3.0	0.5	--	0.1	--	--	50
04/05/66	5000	7970	101		7.3				.29			1.10		.08	.01					0
1210	5050																			
A027R5.00			11.5	55 F	7.7	121	11	5.0	6.5	1.0	0.0	65	6.0	1.7	0.5	--	0.0	19	74	48
05/03/66	5000	9720	109		7.2		.55	.41	.28	.03		1.07	.12	.05	.01				83	0
1410	5050						43	32	22	2		86	10	4	1					
A027R5.00			11.1	51 F	7.9	123	--	--	6.2	--	0.0	64	--	2.3	--	--	0.0	--	--	48
06/07/66	5000	10700	100		7.3				.27			1.05		.06						0
0800	5050																			
A027R5.00			11.1	52 F	8.2	117	--	--	6.2	--	0.0	62	--	2.0	0.8	--	0.0	--	--	48
07/11/66	5000	13200	101		7.3				.27			1.02		.06	.01					0
0910	5050																			
A027R5.00			10.7	53 F	7.6	115	--	--	5.7	--	0.0	61	--	1.7	--	--	0.0	--	--	46
08/09/66	5000	13000	99		7.4				.25			1.00		.05						0
0800	5050																			
A027R5.00			10.4	53 F	7.7	116	9.8	5.3	5.8	1.0	0.0	62	5.0	2.0	0.6	--	0.0	19	72	46
09/13/66	5000	R000	96		7.3		.49	.44	.25	.03		1.02	.10	.06	.01				79	0
1125	5050						40	36	21	2		86	8	5	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	FC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: Ca	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
SACRAMENTO SLOUGH NEAR KNIGHTS LANDING (14a)																				
A02925.00			7.6	66 F	8.4	508	--	--	38	--	6.0	216	--	48	--	--	0.0	--	--	182
10/06/65	5000		81		7.6				1.65		.20	3.54		1.35						0
0745	5050																			
A02925.00			7.6	60 F	8.4	328	--	--	20	--	3.0	170	--	14	--	--	0.1	--	--	128
11/03/65	5000		76		7.6				.87		.10	2.79		.39						0
0900	5050																			
A02925.00			8.7	67 F	8.2	197	--	--	10	--	0.0	106	--	7.2	--	--	0.0	--	--	80
04/07/66	5000		94		7.9				.44			1.74		.20						0
1115	5050																			
A02925.00			6.2	70 F	7.7	439	29	20	34	1.6	0.0	182	20	36	0.6	--	0.1	23	264	154
05/05/66	5000		69		7.6		1.45	1.64	1.48	.04		2.98	.42	1.02	.01				253	5
1110	5050						31	36	32	1		67	9	23						
A02925.00			6.8	72 F	8.4	484	--	--	38	--	4.0	204	--	42	--	--	0.1	--	--	172
06/08/66	5000		77		7.6				1.65		.13	3.35		1.18						0
0600	5050																			
A02925.00			7.4	74 F	8.5	608	--	--	50	--	6.0	246	--	63	--	--	0.0	--	--	210
07/13/66	5000		86		7.8				2.18		.20	4.03		1.78						0
1435	5050																			
A02925.00			6.5	76 F	8.0	557	--	--	45	--	0.0	256	--	48	--	--	0.0	--	--	196
08/11/66	5000		77		8.4				1.96			4.20		1.35						0
1050	5050																			
A02925.00			6.8	76 F	7.8	935	50	39	90	1.3	0.0	320	29	131	3.2	--	0.1	31	528	286
09/14/66	5000		80		8.2		2.50	3.21	3.92	.03		5.25	.60	3.69	.05				531	24
1410	5050						26	33	41			55	6	38	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
COLUSA TROUGH NEAR COLUSA (87)																				
A02976.00 10/04/65 1025	5000 5050	39.15 255	8.5 95	70 F	8.5 7.8	549	30 1.50 25	23 1.89 31	60 2.61 43	2.0 .05 1	7.0 .23 4	198 3.25 56	70 1.46 25	30 .85 15	1.5 .02	--	0.1	21	349 342	169 0
A02976.00 11/03/65 1200	5000 5050	39.01 222	9.1 92	61 F	7.9 7.8	606	29 1.45 23	23 1.89 30	66 2.87 46	2.3 .06 1	0.0	218 3.58 57	80 1.66 27	35 .99 16	1.3 .02	--	0.2	20	382 364	168 0
A02976.00 12/01/65 1130	5000 5050	8.97 196	10.6 92	49 F	8.5 7.9	1040	46 2.30 20	38 3.12 27	136 5.92 52	2.8 .07 1	10 .33 3	302 4.95 45	177 3.68 33	73 2.06 19	3.3 .05	--	0.3	19	662 653	270 6
A02976.00 01/05/66 1140	5000 5050	44.62 1449	10.8 93	48 F	7.5 8.1	607	28 1.40 23	14 1.15 19	78 3.39 56	3.2 .08 1	0.0	137 2.25 39	102 2.12 36	49 1.38 24	5.1 .08 1	--	0.2	12	386 359	127 15
A02976.00 02/08/66 1030	5000 5050	43.19 1108	9.9 85	48 F	8.0 7.6	717	32 1.60 22	23 1.89 26	87 3.78 51	3.7 .09 1	0.0	202 3.31 45	125 2.60 35	48 1.35 18	4.4 .07 1	--	0.2	15	472 437	176 11
A02976.00 03/09/66 1015	5000 5050	8.41 136	10.1 96	56 F	8.5 8.2	1530	62 3.09 18	56 4.60 27	210 9.14 54	1.8 .05	10 .33 2	356 5.84 35	320 6.66 40	130 3.67 22	1.1 .02	--	0.5	15	1040 981	386 78
A02976.00 04/07/66 0935	5000 5050	39.21 259	8.8 94	65 F	8.0 7.8	691	30 1.50 21	21 1.73 24	88 3.83 54	3.0 .08 1	0.0	208 3.41 49	111 2.31 34	40 1.13 16	2.2 .04 1	--	0.1	16	440 413	163 0
A02976.00 05/05/66 0940	5000 5050	43.50 1122	7.2 78	67 F	7.8 7.8	486	24 1.20 24	17 1.40 27	56 2.44 48	2.5 .06 1	0.0	168 2.76 56	73 1.52 31	22 .62 13	2.1 .03 1	--	0.1	13	298 292	129 0
A02976.00 06/08/66 0910	5000 5050	42.03 786	7.9 91	73 F	8.1 8.0	534	22 1.10 20	21 1.73 31	62 2.70 49	1.0 .03 1	0.0	196 3.21 58	73 1.52 28	27 .76 14	1.5 .02	--	0.2	14	302 318	143 0
A02976.00 07/13/66 1215	5000 5050	40.98 546	8.0 92	73 F	8.1 7.8	589	32 1.60 25	23 1.89 30	64 2.78 44	0.9 .02	0.0	240 3.94 60	75 1.56 24	38 1.07 16	1.8 .03	0.4	0.2	15	-- 368	176 0
A02976.00 08/11/66 0910	5000 5050	41.66 689	7.5 88	74 F	8.4 7.7	555	30 1.50 25	24 1.97 32	61 2.61 43	1.2 .03	4.0 .13 2	236 3.87 65	56 1.16 20	26 .73 12	1.5 .02	--	0.2	18	336 337	172 0
A02976.00 09/14/66 1035	5000 5050	41.34 477	8.0 91	72 F	7.9 7.8	570	32 1.60 27	22 1.81 31	57 2.48 42	1.6 .04 1	0.0	232 3.80 63	64 1.33 22	30 .85 14	2.0 .03	--	0.1	18	344 340	170 0

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H.	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
THOMES CREEK NEAR MOUTH (95b)																				
A03200.00			12.1	49 F	8.5	353	--	--	8.1	--	4.0	144	--	6.0	--	--	0.0	--	--	170
12/13/65	5000	50	106		8.0				.35		.13	2.36		.17						46
1345	5050																			
A03200.00			12.6	43 F	8.2	216	--	--	4.9	--	0.0	113	--	2.1	--	--	0.0	--	--	114
01/17/66	5000	50	102		7.8				.21			1.85		.06						22
1145	5050																			
A03200.00			12.1	46 F	8.2	331	--	--	7.2	--	0.0	158	--	3.5	--	--	0.1	--	--	158
02/10/66	5000	40	102		8.0				.31			2.59		.10						29
1135	5050																			
A03200.00			11.8	46 F	8.3	300	--	--	7.2	--	3.0	133	--	3.5	--	--	0.0	--	--	142
03/02/66	5000	40	100		7.9				.31		.10	2.18		.10						28
1130	5050																			
A03200.00			11.2	55 F	8.1	144	--	--	3.1	--	0.0	71	--	0.5	--	--	0.0	--	--	66
04/12/66	5000	150	106		7.7				.13			1.16		.01						8
1220	5050																			
A03200.00			8.5	66 F	8.0	182	26	4.9	3.5	0.9	0.0	90	16	1.5	0.8	--	0.0	8.8	116	85
05/02/66	5000	40	92		8.0		1.30	.40	.15	.02		1.48	.33	.04	.01				107	11
1200	5050						70	21	8	1		80	18	2	1					
A03200.00			8.6	73 F	8.3	281	--	--	5.0	--	3.0	139	--	2.7	--	--	0.0	--	--	138
06/02/66	5000	25	100		7.9				.22		.10	2.28		.08						19
1115	5050																			
A03200.00			9.6	71 F	8.4	408	--	--	7.7	--	4.0	197	--	5.0	--	--	0.0	--	--	206
07/06/66	5000	2	109		7.0				.33		.13	3.23		.14						38
0930	5050																			

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
ELDER CREEK AT GERBER (95a)																				
A03320.00		4.34	12.5	52 F	8.5	429	--	--	16	--	6.0	200	--	26	--	--	0.0	--	--	194
12/13/65	5000	26	114		8.2				.70		.20	3.28		.73						20
1325	5050																			
A03320.00		5.02	12.6	44 F	8.4	284	--	--	8.6	--	3.0	171	--	7.6	--	--	0.0	--	--	153
01/17/66	5000	122	104		8.1				.37		.10	2.80		.21						8
1125	5050																			
A03320.00		5.08	12.1	48 F	8.6	358	--	--	9.7	--	9.0	181	--	9.2	--	--	0.1	--	--	173
02/10/66	5000	145	105		8.2				.42		.30	2.97		.26						10
1155	5050																			
A03320.00		4.93	12.9	50 F	8.5	369	--	--	11	--	6.0	190	--	11	--	--	0.0	--	--	176
03/02/66	5000	106	115		8.3				.48		.20	3.12		.31						10
1145	5050																			
A03320.00		5.05	11.0	65 F	8.4	211	--	--	6.6	--	2.0	110	--	5.3	--	--	0.0	--	--	97
04/12/66	5000	130	117		8.2				.29		.07	1.80		.15						4
1240	5050																			
A03320.00		4.57	9.2	74 F	8.4	287	27	16	9.1	0.9	4.0	147	10	14	0.7	--	0.0	14	161	133
05/02/66	5000	43	108				1.35	1.32	.40	.02	.13	2.41	.21	.39	.01				168	6
1220	5050						44	43	13	1	4	77	7	12						
A03320.00			11.0	74 F	8.7	390	--	--	14	--	11	182	--	24	--	--	0.0	--	--	182
06/02/66	5000	14	127		8.4				.61		.37	2.98		.68						15
1130	5050																			

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER: TDS SUM	TH NCH
RED BANK CREEK NEAR RED BLUFF (88d)																				
A03460.00		4.56	11.3	51 F	8.6	542	--	--	17	--	16	240	--	14	--	--	0.0	--	--	270
12/02/65	5000	11	103		8.1				.74		.53	3.94		.39						47
1330	5050																			
A03460.00		5.52	11.1	53 F	8.2	281	--	--	8.4	--	0.0	148	--	1.9	--	--	0.0	--	--	134
01/06/66	5000	454	104		8.1				.37			2.43		.05						13
1500	5050																			
A03460.00		4.40	12.5	42 F	8.4	468	--	--	13	--	5.0	243	--	3.1	--	--	0.0	--	--	236
02/09/66	5000	62	101		8.2				.57		.17	3.99		.09						28
0830	5050																			
A03460.00		4.12	11.5	50 F	8.6	490	--	--	16	--	10	236	--	5.0	--	--	0.0	--	--	246
03/08/66	5000	45	104		8.2				.70		.33	3.87		.14						36
0900	5050																			
A03460.00		3.90	10.0	65 F	8.3	513	--	--	17	--	4.0	260	--	6.0	--	--	0.0	--	--	256
04/06/66	5000	13	108		8.1				.74		.13	4.26		.17						37
0920	5050																			
A03460.00		3.72	8.4	65 F	8.2	520	56	28	17	1.2	0.0	274	51	9.6	0.4	--	0.0	15	312	254
05/04/66	5000	3	90		8.0		2.79	2.30	.74	.03		4.49	1.06	.27	.01				312	30
0755	5050						48	39	13	1		77	18	5						

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. Q	DO SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
COTTONWOOD CREEK NEAR COTTONWOOD (12b)																				
A03520.00		6.26	9.3	63 F	8.4	197	--	--	7.3	--	2.0	103	--	4.3	--	--	0.0	--	--	86
10/07/65	5000	89	97		7.3				.32		.07	1.69		.12						0
0840	5050																			
A03520.00		6.25	10.5	60 F	8.3	221	--	--	8.3	--	2.0	118	--	7.2	--	--	0.0	--	--	97
11/04/65	5000	87	106		7.3				.36		.07	1.94		.20						0
0900	5050																			
A03520.00		6.92	12.2	47 F	8.3	258	--	--	10	--	2.0	117	--	12	--	--	0.0	--	--	112
12/13/65	5000	298	105		7.6				.44		.07	1.92		.34						13
1200	5050																			
A03520.00			12.3	43 F	8.0	217	--	--	7.7	--	0.0	124	--	5.6	--	--	0.0	--	--	110
01/17/66	5000	1040	100		7.3				.33			2.03		.16						9
1015	5050																			
A03520.00			12.0	45 F	8.2	254	--	--	9.1	--	0.0	125	--	5.9	--	--	0.0	--	--	107
02/10/66	5000	1080.	100		7.6				.40			2.05		.17						5
0905	5050																			
A03520.00			12.0	47 F	8.2	254	--	--	9.9	--	0.0	126	--	4.8	--	--	0.0	--	--	113
03/02/66	5000	870	103		7.4				.43			2.07		.14						10
1250	5050																			
A03520.00			11.2	57 F	8.2	186	--	--	6.0	--	0.0	97	--	2.3	--	--	0.0	--	--	83
04/13/66	5000	942	109		7.6				.26			1.59		.06						4
1135	5050																			
A03520.00			9.9	79 F	8.2	220	25	9.4	7.1	0.8	0.0	122	11	5.2	0.7	--	0.0	16	133	101
05/02/66	5000	410	122		7.7		1.25	.77	.31	.02		2.00	.23	.15	.01				135	1
1335	5050						63	33	13	1		84	10	6						
A03520.00			11.0	65 F	8.3	207	--	--	7.4	--	2.0	110	--	5.2	--	--	0.0	--	--	92
06/02/66	5000	250	117		7.8				.32		.07	1.80		.15						0
1230	5050																			
A03520.00			10.4	84 F	8.0	232	--	--	8.7	--	0.0	128	--	5.8	--	--	0.0	--	--	103
07/06/66	5000	100	135		7.7				.34			2.10		.16						0
1200	5050																			
A03520.00			10.3	82 F	8.2	200	--	--	7.4	--	0.0	111	--	3.2	0.9	--	0.1	--	--	88
08/12/66	5000	53	131		7.4				.34			1.82		.09	.01					0
1500	5050																			
A03520.00			10.2	71 F	8.1	194	18	9.8	7.4	1.4	0.0	110	7.0	4.2	0.7	--	0.0	22	125	86
09/01/66	5000	51	150		7.3		.90	.81	.34	.04		1.80	.15	.09	.01				124	0
0940	5050						43	39	16	2		88	7	4						

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE — CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
COTTONWOOD CREEK BELOW NORTH FORK COTTONWOOD CREEK (11a)																				
A03540.00			9.0	47 F	8.6	322	--	--	11	--	7.0	160	--	16	--	--	0.0	--	--	148
10/07/65	5000	1.5	99		7.7				.48		.23	2.62		.45						6
0915	5050																			
A03540.00			9.8	60 F	8.5	299	--	--	11	--	4.0	147	--	16	--	--	0.0	--	--	133
11/04/65	5000	2.0	100		7.7				.48		.13	2.41		.45						6
0935	5050																			
A03540.00			12.1	45 F	8.3	216	--	--	7.6	--	1.0	107	--	6.5	--	--	0.0	--	--	95
12/13/65	5000	7.5	102		7.8				.33		.03	1.75		.18						6
1600	5050																			
A03540.00			12.1	43 F	8.0	158	--	--	5.6	--	0.0	72	--	2.2	--	--	0.0	--	--	66
01/05/66	5000	1000	99		7.6				.24			1.18		.06						7
1510	5050																			
A03540.00			11.7	46 F	8.0	161	--	--	6.2	--	0.0	75	--	2.2	--	--	0.0	--	--	67
02/04/66	5000	500	100		7.6				.27			1.23		.06						6
1415	5050																			
A03540.00			12.5	47 F	8.3	227	--	--	7.5	--	2.0	116	--	2.2	--	--	0.0	--	--	105
03/02/66	5000	350	104		7.7				.33		.07	1.90		.06						7
1320	5050																			
A03540.00			11.2	55 F	8.4	169	--	--	4.7	--	2.0	89	--	1.2	--	--	0.0	--	--	79
04/13/66	5000	350	107		7.8				.20		.07	1.46		.03						3
1210	5050																			
A03540.00			9.3	64 F	8.2	209	22	11	5.6	0.8	0.0	112	10	3.6	0.9	--	0.0	18	128	100
05/03/66	5000	80	99		7.9		1.10	.90	.24	.02		1.84	.21	.10	.01				127	8
1050	5050						49	40	11	1		85	10	5						
A03540.00			9.9	63 F	8.2	223	--	--	6.1	--	0.0	116	--	4.4	--	--	0.0	--	--	97
06/03/66	5000	50	104		7.8				.27			1.90		.12						2
1015	5050																			
A03540.00			9.5	78 F	8.6	278	--	--	8.9	--	7.0	146	--	8.8	--	--	0.0	--	--	132
07/07/66	5000	20	117		7.9				.39		.23	2.39		.25						1
1100	5050																			
A03540.00			8.2	71 F	8.2	312	29	17	11	1.3	0.0	168	9.0	15	0.6	--	0.0	20	189	142
09/02/66	5000	10	92		7.6		1.45	1.40	.48	.03		2.76	.19	.42	.01				185	4
0810	5050						43	42	14	1		82	6	12						

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. O	DO / SAT	TEMP	PH LAB / FLD	FC LAB / FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
SOUTH FORK COTTONWOOD CREEK ABOVE COTTONWOOD CREEK (11b)																				
A03595.00 10/07/65 0815	5000 5050	.1	6.0 64	65 F	8.5 7.3	366	-- --	-- --	15 .65	-- --	4.0 .13	162 2.66	-- --	22 .62	-- --	-- --	0.1	-- --	-- --	157 18
A03595.00 11/04/65 0840	5000 5050	1.0	7.7 79	62 F	8.5 7.3	368	-- --	-- --	15 .65	-- --	4.0 .13	140 2.30	-- --	32 .90	-- --	-- --	0.1	-- --	-- --	154 33
A03595.00 12/13/65 1245	5000 5050	30	12.5 107	47 F	8.4 8.0	391	-- --	-- --	19 .83	-- --	2.0 .07	149 2.44	-- --	28 .79	-- --	-- --	0.0	-- --	-- --	160 35
A03595.00 01/17/66 1045	5000 5050	80	13.0 107	44 F	8.2 8.0	279	-- --	-- --	12 .52	-- --	0.0	146 2.39	-- --	12 .34	-- --	-- --	0.0	-- --	-- --	136 17
A03595.00 02/10/66 0935	5000 5050	70	12.4 101	43 F	8.4 8.0	400	-- --	-- --	18 .78	-- --	5.0 .17	174 2.85	-- --	14 .39	-- --	-- --	0.1	-- --	-- --	171 20
A03595.00 03/02/66 1230	5000 5050	60	12.0 104	44 F	8.5 8.1	390	-- --	-- --	19 .83	-- --	5.0 .17	166 2.72	-- --	12 .34	-- --	-- --	0.0	-- --	-- --	168 24
A03595.00 04/13/66 1110	5000 5050	100	11.3 107	55 F	8.4 7.9	205	-- --	-- --	8.1 .35	-- --	2.0 .07	99 1.62	-- --	5.1 .14	-- --	-- --	0.0	-- --	-- --	90 6
A03595.00 05/03/66 1125	5000 5050	50	9.4 101	66 F	8.2 7.9	226	28 1.40 59	7.1 .58 24	8.8 .38 16	0.8 .02 1	0.0	110 1.80 77	14 .29 12	8.3 .23 10	0.5 .01	-- --	0.0	12 --	138 133	99 9
A03595.00 06/02/66 1210	5000 5050	60	9.4 101	66 F	8.0 8.0	231	-- --	-- --	9.5 .41	-- --	0.0	114 1.87	-- --	8.5 .24	-- --	-- --	0.0	-- --	-- --	98 5
A03595.00 07/06/66 0830	5000 5050	5.0	8.1 95	75 F	8.4 7.6	285	-- --	-- --	13 .57	-- --	3.0 .10	130 2.13	-- --	16 .45	-- --	-- --	0.0	-- --	-- --	120 9

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER TDS SUM	TH NCH
BIG CHICO CREEK AT CHICO (85a)																				
A04250.00		3.72	10.0	64 F	8.4	211	--	--	13	--	2.0	106	--	10	--	--	0.1	--	--	76
10/06/65	5000	6.0	105		7.8				.57		.07	1.74		.28						0
1350	5050																			
A04250.00		3.82	10.6	57 F	8.3	212	--	--	14	--	1.0	108	--	9.5	--	--	0.1	--	--	78
11/03/65	5000	10	103		7.9				.61		.03	1.77		.27						0
1500	5050																			
A04250.00		4.11	12.3	47 F	8.2	143	--	--	8.2	--	0.0	74	--	5.6	--	--	0.0	--	--	54
12/01/65	5000	37	105		7.5				.36			1.21		.16						0
1420	5050																			
A04250.00		5.57	12.0	48 F	7.7	58	--	--	2.7	--	0.0	32	--	1.1	--	--	0.0	--	--	23
01/05/66	5000	298	104		7.2				.12			.52		.03						0
1500	5050																			
A04250.00		4.60	12.2	45 F	8.0	92	--	--	4.9	--	0.0	47	--	1.6	--	--	0.1	--	--	36
02/08/66	5000	129	102		7.5				.21			.77		.05						0
1300	5050																			
A04250.00		4.32	11.8	53 F	8.1	118	--	--	6.4	--	0.0	62	--	2.9	--	--	0.0	--	--	46
03/08/66	5000	72	109		7.8				.28			1.02		.08						0
1400	5050																			
A04250.00		4.28	10.8	62 F	8.1	122	--	--	6.8	--	0.0	65	--	3.6	--	--	0.0	--	--	48
04/06/66	5000	64	111		7.8				.30			1.07		.10						0
1340	5050																			
A04250.00		4.03	9.5	63 F	8.0	162	14	6.6	9.7	0.9	0.0	84	5.0	6.4	0.9	--	0.2	32	111	62
05/04/66	5000	26	99		7.9		.70	.54	.42	.02		1.38	.10	.18	.01				117	0
1140	5050						42	32	25	1		83	6	11	1					
A04250.00		3.83	9.1	71 F	8.2	192	--	--	13	--	0.0	99	--	9.0	--	--	0.1	--	--	71
06/09/66	5000	11	104		8.2				.57			1.62		.25						0
0950	5050																			

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER TDS SUM	TH NCH
ANTELOPE CREEK NEAR MOUTH (88c)																				
A04520.00			9.5	63 F	8.1	205	--	--	16	--	0.0	73	--	16	--	--	0.5	--	--	44
10/06/65	5000	10	99		7.5				.70			1.20		.45						4
1350	5050																			
A04520.00			11.1	55 F	8.2	213	--	--	18	--	0.0	75	--	27	--	--	0.5	--	--	60
11/03/65	5000	10	105		7.6				.78			1.23		.76						0
1355	5050																			
A04520.00			11.9	46 F	7.6	180	--	--	9.2	--	0.0	86	--	7.5	--	--	0.1	--	--	72
12/13/65	5000	15	101		7.3				.40			1.41		.21						2
1430	5050																			
A04520.00			11.0	45 F	7.9	169	--	--	7.8	--	0.0	100	--	5.5	--	--	0.0	--	--	81
01/17/66	5000	3.0	92		7.1				.34			1.64		.16						0
1250	5050																			
A04520.00			11.7	45 F	7.9	131	--	--	5.6	--	0.0	72	--	3.0	--	--	0.1	--	--	56
02/10/66	5000	15	98		7.2				.24			1.18		.08						0
1015	5050																			
A04520.00			12.2	45 F	8.0	117	--	--	5.1	--	0.0	66	--	1.3	--	--	0.0	--	--	49
03/02/66	5000	15	102		7.2				.22			1.08		.04						0
1055	5050																			
A04520.00			10.9	55 F	7.8	133	--	--	8.1	--	0.0	51	--	4.0	--	--	0.2	--	--	65
04/12/66	5000	15	103		7.2				.35			.84		.11						3
1140	5050																			
A04520.00			8.4	64 F	7.7	188	13	8.4	11	2.8	0.0	77	16	7.4	1.6	--	0.3	33	159	67
05/02/66	5000	10	88		7.1		.65	.69	.48	.07		1.26	.33	.21	.03				131	4
1115	5050						34	37	25	4		69	18	11	2					
A04520.00			7.3	62 F	7.5	233	--	--	12	--	0.0	89	--	11	--	--	0.3	--	--	80
06/02/66	5000	5.0	75		7.1				.52			1.46		.31						7
1010	5050																			

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. Q	DO SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE									MILLIGRAMS PER LITER				
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
PAYNES CREEK NEAR RED BLUFF (88g)																				
A04620.00			9.3	57 F	8.4	228	--	--	14	--	2.0	113	--	15	--	--	0.4	--	--	77
10/06/65	5000	10	101		7.4				.78		.07	1.85		.42						0
1240	5050																			
A04620.00			9.4	61 F	8.2	233	--	--	19	--	0.0	115	--	14	--	--	0.4	--	--	76
11/03/65	5000	15	96		7.4				.83			1.89		.39						0
1245	5050																			
A04620.00			10.7	50 F	8.0	229	--	--	17	--	0.0	114	--	14	--	--	0.3	--	--	77
12/15/65	5000	20	95		7.4				.74			1.87		.39						0
1130	5050																			
A04620.00			11.2	50 F	7.8	164	--	--	13	--	0.0	94	--	8.6	--	--	0.2	--	--	63
01/17/66	5000	20	100		7.3				.57			1.54		.24						0
1400	5050																			
A04620.00			11.7	49 F	8.0	128	--	--	7.8	--	0.0	68	--	3.2	--	--	0.2	--	--	46
02/09/66	5000	40	103		7.3				.34			1.12		.09						0
1410	5050																			
A04620.00			12.0	45 F	8.0	131	--	--	8.7	--	0.0	71	--	3.8	--	--	0.1	--	--	48
03/02/66	5000	30	100		7.4				.38			1.16		.11						0
0945	5050																			
A04620.00			10.1	59 F	8.2	189	--	--	13	--	0.0	97	--	7.8	--	--	0.2	--	--	66
04/12/66	5000	20	101		7.6				.57			1.59		.22						0
1030	5050																			
A04620.00			10.4	61 F	8.0	201	14	8.0	15	1.5	0.0	106	2.0	10	1.4	--	0.4	42	148	68
05/02/66	5000	20	104		7.3		.70	.66	.65	.04		1.74	.04	.28	.02				146	0
1005	5050						34	32	32	2		84	2	13	1					
A04620.00			9.6	61 F	7.9	221	--	--	16	--	0.0	110	--	14	--	--	0.3	--	--	86
06/02/66	5000	.3	98		7.3				.70			1.80		.39						0
0900	5050																			
A04620.00			9.4	66 F	8.3	223	--	--	18	--	2.0	107	--	14	--	--	0.3	--	--	75
07/06/66	5000		101		7.1				.78		.07	1.75		.39						0
0745	5050																			
A04620.00			6.7	64 F	7.4	247	14	10	21	1.6	0.0	114	1.0	18	2.2	--	0.5	48	166	76
09/07/66	5000	4.0	71		7.2		.70	.82	.91	.04		1.87	.02	.51	.04				172	0
0755	5050						28	33	37	2		77	1	21	2					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H.	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
A 0 5103.00 FEATHER RIVER AT NICOLAUS (20)																				
A05103.00		22.92	9.3	--	8.1	110	--	--	4.0	--	0.0	63	--	1.1	--	--	.00	--	--	46
10/08/65	5000	2400	98	65	7.3				.17			1.03		.03						0
0730																				
A05103.00		23.53	10.6	--	7.7	113	--	--	4.3	--	0.0	64	--	1.2	--	--	.10	--	--	48
11/05/65	5000	3120	106	60	7.5				.19			1.05		.03						0
1530																				
A05103.00		24.02	12.2	--	8.0	105	--	--	4.1	--	0.0	61	--	1.5	--	--	.00	--	--	44
12/03/65	5000	5740	104	47	7.1				.18			1.00		.04						0
1500																				
A05103.00		31.83	11.1	--	7.5	90	--	--	3.7	--	0.0	40	--	2.4	--	--	.00	--	--	34
01/07/66	5000	16700	94	47	7.3				.16			.66		.07						1
0835																				
A05103.00			12.2	--	8.1	115	--	--	4.8	--	0.0	58	--	2.5	--	--	.00	--	--	47
02/11/66	5000		102	46	7.3				.21			.95		.07						0
1545																				
A05103.00		25.24	11.6	--	7.8	110	--	--	4.3	--	0.0	58	--	1.8	--	--	.00	--	--	47
03/10/66	5000	5440	108	54	7.3				.19			.95		.05						0
1515																				
A05103.00		28.52	11.0	--	7.9	74	--	--	2.8	--	0.0	38	--	1.1	--	--	.00	--	--	31
04/07/66	5000	10410	109	59	7.3				.12			.62		.03						0
1515																				
A05103.00		25.16	9.8	--	7.6	70	7.4	2.6	2.5	0.7	0.0	36	3.0	0.6	0.4	--	.00	11	54	29
05/05/66	5000	5320	102	64	7.3		.37	.21	.11	.02		.59	.06	.02	.01				46	0
1315							62	30	15	3		87	9	3	1					
A05103.00		20.00	9.4	--	8.1	110	--	--	3.8	--	0.0	58	--	1.2	--	--	.00	--	--	48
06/09/66	5000		120	84	8.3				.17			.95		.03						1
1415																				
A05103.00		19.05	9.2	--	7.6	124	--	--	4.7	--	0.0	68	--	2.0	--	--	.00	--	--	55
07/14/66	5000		111	78	8.4				.20			1.12		.06						0
1430																				
A05103.00		18.61	7.4	--	7.5	136	--	--	8.0	--	0.0	78	--	2.8	--	--	.00	--	--	58
08/11/66	5000		88	76	7.7				.35			1.28		.08						0
0730																				
A05103.00			10.1	--	8.1	141	14	7.3	5.5	1.0	--	77	3.6	2.4	6.8	--	.00	--	96	65
09/15/66	5000		117	74	8.3		.70	.60	.24	.03		1.26	.07	.07	.11				78	2
1500							45	38	15	2		83	5	5	7					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER: TDS SUM	TH NCH
A 0 5120.00 FEATHER RIVER BELOW SHANGHAI BEND (20a)																				
A05120.00		34.80	9.2	--	8.2	110	--	--	4.4	--	0.0	63	--	1.2	--	--	.00	--	--	46
10/08/65 0815	5000	2320	97	65	7.3				.19			1.03		.03						0
A05120.00		35.28	10.6	--	8.1	115	--	--	4.4	--	0.0	66	--	0.8	--	--	.00	--	--	49
11/05/65 1500	5000	2820	106	60	7.5				.21			1.08		.02						0
A05120.00		35.67	12.2	--	8.0	108	--	--	4.1	--	0.0	59	--	1.6	--	--	.00	--	--	45
12/03/65 1415	5000	3270	102	46	7.3				.18			.97		.05						0
A05120.00		41.33	12.3	--	7.5	83	--	--	3.7	--	0.0	40	--	1.2	--	--	.00	--	--	34
01/07/66 0930	5000	12800	103	46	7.3				.16			.66		.03						1
A05120.00		35.96	12.6	--	8.0	114	--	--	4.6	--	0.0	60	--	2.2	--	--	.00	--	--	47
02/11/66 1500	5000	3610	104	45	7.3				.20			.98		.06						0
A05120.00		36.65	11.7	--	8.1	111	--	--	4.4	--	0.0	59	--	1.2	--	--	.00	--	--	47
03/10/66 1430	5000	6580	107	53	7.3				.19			.97		.03						0
A05120.00		40.01	11.2	--	7.8	69	--	--	2.7	--	0.0	36	--	0.8	--	--	.01	--	--	30
04/07/66 1445	5000	10100	108	57	7.3				.12			.59		.02						1
A05120.00		36.70	10.2	--	7.7	69	9.2	1.7	2.6	0.6	0.0	36	3.0	0.8	0.5	--	.01	12	46	30
05/05/66 1245	5000	4570	104	62	7.3		.46	.14	.11	.02		.59	.06	.02	.01				48	1
							63	19	15	3		87	9	3	1					
A05120.00		32.34	10.0	--	8.1	113	--	--	3.8	--	0.0	59	--	1.1	--	--	.00	--	--	48
06/09/66 1330	5000		115	73	8.1				.17			.97		.03						0
A05120.00		31.99	9.4	--	7.7	123	--	--	4.4	--	0.0	69	--	2.9	--	--	.00	--	--	54
07/14/66 1345	5000		110	75	7.9				.19			1.13		.08						0
A05120.00		31.82	7.2	--	7.7	174	--	--	5.6	--	0.0	74	--	2.9	--	--	.00	--	--	58
08/11/66 0800	5000		86	77	7.3				.24			1.21		.08						0
A05120.00			9.5	--	8.0	136	12	7.8	5.0	1.0	0.0	76	4.1	2.4	0.5	--	.00	--	98	62
09/15/66 1415	5000		109	73	7.9		.60	.64	.22	.03		1.25	.09	.07	.01				70	0
							40	43	15	2		88	6	5	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. (0)	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
A 0 6120.00 YUBA RIVER AT MARYSVILLE (21)																				
A06120.00		60.14	10.6	--	8.0	119	--	--	3.3	--	0.0	62	--	1.2	--	--	.00	--	--	56
11/05/65 1400	5000	14	112	65	7.5				.14			1.02		.03						5
A06120.00		62.87	12.7	--	7.7	100	--	--	3.3	--	0.0	50	--	1.2	--	--	.00	--	--	44
01/07/66 1015	5000	1670	105	45	7.5				.14			.82		.03						3
A06120.00		61.92	11.9	--	8.0	98	--	--	3.1	--	0.0	47	--	0.9	--	--	.00	--	--	42
03/10/66 0945	5000	688	105	50	7.3				.13			.77		.03						4
A06120.00		62.10	10.6	--	7.5	66	7.4	2.6	1.4	0.6	0.0	34	3.0	0.4	0.3	--	.00	11	52	29
05/05/66 1130	5000	850	107	61	7.3		.37	.21	.06	.02		.56	.06	.03					44	1
							64	31	12	3		86	4	5						
A06120.00		59.57	9.5	--	7.9	124	--	--	3.0	--	0.0	62	--	2.0	--	--	.00	--	--	58
07/14/66 1230	5000		114	77	7.7				.13			1.02		.06						7
A06120.00			9.5	--	8.1	138	1.6	5.4	3.4	0.7	0.0	70	9.4	1.2	1.8	--	.00	--	100	62
09/15/66 1300	5000		112	75	7.9		.80	.44	.15	.02		1.15	.20	.03	.03				72	5
							67	31	11	1		82	14	2	2					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. (ft)	DO SAT	TEMP	PH LAB	PH FLD	EC LAB	EC FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
A 0 6550.00 BEAR RIVER NEAR WHEATLAND (78)																						
A06550.00		1.89	9.2	--	8.3		212		--	--	5.9	--	1.0	100	--	3.8	--	--	.00	--	--	98
10/05/65	5000		107	74	7.5						.26		.03	1.64		.11						15
0915																						
A06550.00				--	8.3		235		--	--	5.9	--	2.0	104	--	4.8	--	--	.00	--	--	108
10/08/65	5000										.26		.07	1.71		.14						19
1145																						
A06550.00		1.74	9.2	--	8.3		212		--	--	5.9	--	1.0	100	--	3.8	--	--	.00	--	--	98
11/05/65	5000		89	57	7.3						.26		.03	1.64		.11						15
0915																						
A06550.00		1.82	10.6	--	8.0		201		--	--	5.6	--	0.0	91	--	5.2	--	--	.00	--	--	90
12/03/65	5000		91	48	7.3						.24			1.49		.15						16
0845																						
A06550.00		2.76	12.2	--	8.4		109		--	--	3.7	--	2.0	44	--	2.7	--	--	.00	--	--	45
01/07/66	5000	208	105	48	7.5						.15		.07	.72		.08						6
1440																						
A06550.00		3.04	12.5	--	7.9		103		--	--	3.6	--	0.0	44	--	3.0	--	--	.01	--	--	43
02/11/66	5000		102	44	7.2						.16			.72		.08						7
0845																						
A06550.00		3.41	11.6	--	7.8		101		--	--	3.7	--	0.0	42	--	2.9	--	--	.00	--	--	42
03/10/66	5000	506	102	50	7.3						.16			.69		.08						8
0845																						
A06550.00		2.96	10.8	--	7.5		99		--	--	3.4	--	0.0	41	--	2.8	--	--	.01	--	--	40
04/07/66	5000	284	102	55	7.3						.15			.67		.08						7
0845																						
A06550.00		1.19	8.8	--	7.9		157		15	7.9	4.5	0.7	0.0	70	15	3.5	0.4	--	.00	11	97	70
05/05/66	5000		90	62	7.3				.75	.65	.20	.02		1.15	.31	.10	.01				92	13
0730									46	40	12	1		73	20	6	1					
A06550.00		1.20	8.6	--	7.0		145		--	--	4.4	--	0.0	57	--	3.7	--	--	.00	--	--	64
06/09/66	5000		91	65	7.3						.14			.93		.10						18
0730																						
A06550.00		1.00	7.8	--	7.9		185		--	--	4.4	--	0.0	90	--	6.1	--	--	.00	--	--	84
07/14/66	5000		86	69	7.5						.14			1.48		.17						10
0745																						
A06550.00		1.01	9.2	--	7.3		202		--	--	6.2	--	0.0	92	--	7.9	--	--	.00	--	--	91
08/11/66	5000		112	79	8.1						.27			1.51		.22						16
1330																						
A06550.00			8.0	--	8.1		224		19	11	5.8	0.7	0.0	101	15	6.8	3.4	--	.00	--	140	92
09/15/66	5000		84	64	7.5				.95	.90	.25	.02		1.66	.31	.19	.05				111	9
									47	45	13	1		79	14	9	2					

TABLE D 2
MINERAL ANALYSIS OF SURFACE WATER

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. (ft)	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER				MILLIGRAMS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER			TDS SUM	TH NCH
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2		
A 0 7140.00 AMERICAN RIVER AT SACRAMENTO (22)																				
A07140.00		18.35	9.5	--	7.8	56	--	--	1.9	--	0.0	26	--	1.3	--	--	.00	--	--	21
10/08/65 1300	5000		103	67	7.1				.08			.43		.04						0
A07140.00		18.08	10.2	--	7.8	51	--	--	2.6	--	0.0	24	--	1.4	--	--	.00	--	--	20
11/02/65 1545	5000		102	60	7.1				.11			.39		.04						1
A07140.00		19.09	10.3	--	7.7	62	--	--	2.4	--	0.0	28	--	1.8	--	--	.00	--	--	24
11/30/65 1430	5000		98	56	7.1				.10			.46		.05						1
A07140.00		18.06	11.9	--	7.7	66	--	--	2.7	--	0.0	28	--	1.9	--	--	.00	--	--	24
01/05/66 1345	5000		102	48	7.3				.12			.46		.05						1
A07140.00		18.08	11.9	--	7.8	75	--	--	3.4	--	0.0	32	--	2.3	--	--	.00	--	--	28
02/07/66 1415	5000		102	48	7.1				.15			.52		.06						2
A07140.00		18.05	11.3	--	7.5	80	--	--	3.3	--	0.0	34	--	2.7	--	--	.00	--	--	30
03/08/66 0800	5000		100	50	7.1				.14			.56		.08						2
A07140.00		18.22	10.6	--	7.7	75	--	--	2.8	--	0.0	32	--	2.4	--	--	.01	--	--	30
04/08/66 0800	5000		98	54	7.3				.12			.52		.07						4
A07140.00		17.43	9.5	--	7.2	75	7.8	2.1	3.6	0.8	0.0	31	5.0	2.1	1.8	--	.00	9.3	46	28
05/03/66 0730	5000		98	63	7.3		.39	.17	.16	.02		.51	.10	.06	.03				48	3
							53	23	22	3		73	14	9	4					
A07140.00		17.51	9.1	--	7.8	71	--	--	3.2	--	0.0	30	--	1.9	--	--	.00	--	--	26
06/10/66 0800	5000		95	65	7.1				.14			.49		.05						2
A07140.00		18.33	9.2	--	7.1	65	--	--	2.7	--	0.0	29	--	2.9	--	--	.00	--	--	26
07/15/66 0700	5000		95	63	7.1				.12			.48		.08						2
A07140.00		18.35	9.3	--	6.7	60	--	--	2.4	--	0.0	31	--	2.0	--	--	.00	--	--	24
08/08/66 1145	5000		102	68	7.3				.10			.51		.06						0
A07140.00			9.5	--	7.7	71	7.1	1.8	2.8	0.7	0.0	31	2.3	2.6	3.0	--	.00	--	55	25
09/16/66 1400	5000		105	69	7.1		.35	.15	.12	.02		.51	.05	.07	.05				35	0
							55	23	19	3		75	7	10	7					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
PIT RIVER NEAR MONTGOMERY CREEK (17)																				
A11020.00 10/07/65 1230	5000 5050	2740	9.7 100	59 F	8.3 7.8	159	-- 	-- 	11 .48	-- 	1.0 .03	88 1.44	-- 	3.0 .08	-- 	-- 	0.0 	-- 	-- 	56 0
A11020.00 11/04/65 1240	5000 5050	2970	9.8 95	54 F	8.2 7.5	160	-- 	-- 	11 .48	-- 	0.0 	91 1.49	-- 	3.2 .09	-- 	-- 	0.1 	-- 	-- 	56 0
A11020.00 12/14/65 0945	5000 5050	504	12.9 109	44 F	8.0 7.4	161	-- 	-- 	11 .48	-- 	0.0 	91 1.49	-- 	3.1 .09	-- 	-- 	0.0 	-- 	-- 	58 0
A11020.00 01/18/66 0945	5000 5050	464	12.1 100	42 F	7.8 7.2	121	-- 	-- 	8.1 .35	-- 	0.0 	76 1.25 1	-- 	2.0 .06	-- 	-- 	0.0 	-- 	-- 	50 0
A11020.00 02/04/66 1020	5000 5050	257	12.6 107	44 F	8.1 7.4	136	-- 	-- 	8.4 .37	-- 	0.0 	76 1.25	-- 	2.6 .07	-- 	-- 	0.0 	-- 	-- 	49 0
A11020.00 04/19/66 0920	5000 5050	723	10.5 98	51 F	7.7 7.1	114	-- 	-- 	6.5 .28	-- 	0.0 	66 1.08	-- 	0.8 .02	-- 	-- 	0.1 	-- 	-- 	44 0
A11020.00 05/04/66 1015	5000 5050	459	10.6 102	54 F	8.0 7.4	113	9.8 .49 42	4.3 .35 30	6.9 .30 25	1.4 .04 3	0.0 	66 1.08 95	1.0 .02 2	1.2 .03 3	0.6 .01 1	-- 	0.0 	25 	84 83	42 0
A11020.00 06/09/66 1350	5000 5050	479	10.4 107	59 F	8.2 7.9	119	-- 	-- 	7.4 .32	-- 	0.0 	69 1.13	-- 	1.4 .04	-- 	-- 	0.0 	-- 	-- 	45 0
A11020.00 07/05/66 0815	5000 5050	310	11.0 117	62 F	8.2 8.2	134	-- 	-- 	9.4 .41	-- 	0.0 	78 1.28	-- 	2.1 .06	-- 	-- 	0.0 	-- 	-- 	50 0
A11020.00 08/04/66 1430	5000 5050	374	9.6 109	64 F	8.1 8.2	135	-- 	-- 	9.3 .40	-- 	0.0 	77 1.26	-- 	2.4 .07	-- 	-- 	0.0 	-- 	-- 	48 0
A11020.00 09/08/66 1020	5000 5050	31	10.0 104	64 F	7.6 8.1	139	10 .50 35	5.7 .47 33	9.3 .40 24	2.1 .05 4	0.0 	79 1.30 92	1.0 .02 1	2.4 .07 5	1.4 .02 1	-- 	0.1 	31 	102 102	48 0

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / PH FLD	EC LAB / EC FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
PIT RIVER NEAR CANBY (17a)																				
A11680.00		2.65	9.3	56 F	8.5	279	--	--	26	--	5.0	147	--	5.5	--	--	0.1	--	--	87
10/05/65	5000	77	102		7.9				1.13		.17	2.41		.16						0
1620	5050																			
A11680.00		2.65	10.2	50 F	8.5	274	--	--	25	--	4.0	150	--	6.2	--	--	0.2	--	--	82
11/02/65	5000	81	105		8.1				1.13		.13	2.46		.17						0
1600	5050																			
A11680.00		2.62	13.0	35 F	8.0	270	--	--	27	--	0.0	140	--	9.0	--	--	0.1	--	--	81
12/14/65	5000	73	108		7.9				1.17			2.30		.25						0
1200	5050																			
A11680.00		2.72	11.7	33 F	7.9	285	--	--	30	--	0.0	160	--	10	--	--	0.1	--	--	93
01/18/66	5000	97	94		7.5				1.31			2.62		.28						0
1350	5050																			
A11680.00		2.81	11.2	34 F	7.9	279	--	--	28	--	0.0	141	--	8.7	--	--	0.1	--	--	79
02/08/66	5000	126	92		7.4				1.22			2.31		.25						0
1730	5050																			
A11680.00		2.87	10.2	45 F	8.1	232	--	--	22	--	0.0	118	--	6.4	--	--	0.2	--	--	72
03/23/66	5000	145	98		7.7				.96			1.94		.18						0
1225	5050																			
A11680.00		3.92	9.7	48 F	7.6	227	--	--	19	--	0.0	126	--	3.1	--	--	0.0	--	--	74
04/19/66	5000	162	97		7.6				.83			2.07		.09						0
1130	5050																			
A11680.00		2.25	8.8	63 F	7.8	263	21	8.4	21	4.3	0.0	142	14	6.7	1.0	--	0.0	19	182	87
05/04/66	5000	12	105		8.0		1.05	.69	.91	.11		2.33	.29	.19	.02				165	0
1310	5050						38	25	33	4		82	10	7	1					
A11680.00		2.67	8.1	64 F	8.1	312	--	--	31	--	0.0	180	--	4.5	--	--	0.1	--	--	100
06/09/66	5000	70	98		7.8				1.35			2.95		.13						0
1035	5050																			
A11680.00		2.52	8.7	68 F	7.7	338	--	--	35	--	0.0	191	--	5.0	--	--	0.1	--	--	101
07/05/66	5000	60	104		8.2				1.52			3.13		.17						0
1035	5050																			
A11680.00			9.8	75 F	8.2	309	--	--	29	--	0.0	172	--	4.6	2.5	--	0.2	--	--	96
08/15/66	5000	41	133		8.2				1.26			2.82		.19	.04					0
1400	5050																			
A11680.00		2.20	7.6	69 F	8.2	324	24	11	33	5.3	0.0	177	16	8.2	1.8	--	0.1	30	231	105
09/08/66	5000	7	83		8.1		1.20	.90	1.31	.14		2.90	.33	.23	.03				213	0
0740	5050						34	25	37	4		83	9	7	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
SOUTH FORK PIT RIVER NEAR LIKELY (18a)																				
A14400.00		2.13	9.9	46 F	8.1	106	--	--	5.6	--	0.0	65	--	0.5	--	--	0.0	--	--	42
10/06/65	5000	33	98		7.7				.24			1.07		.01						0
0810	5050											1								
A14400.00		2.07	10.9	43 F	8.2	100	--	--	5.0	--	0.0	60	--	0.4	--	--	0.0	--	--	40
11/03/65	5000	32	104		7.5				.22			.98		.01						0
0820	5050																			
A14400.00		2.18	12.9	33 F	8.0	112	--	--	5.6	--	0.0	68	--	0.6	--	--	0.0	--	--	44
12/14/65	5000	41	106		7.7				.24			1.12		.02						0
1340	5050											1								
A14400.00		2.36	12.7	33 F	7.9	97	--	--	5.0	--	0.0	62	--	0.4	--	--	0.0	--	--	43
01/19/66	5000	28	104		7.4				.22			1.02		.01						0
0910	5050											1								
A14400.00		2.29	12.5	33 F	8.1	106	--	--	5.3	--	0.0	62	--	0.6	--	--	0.1	--	--	41
02/09/66	5000	32	102		7.4				.23			1.02		.02						0
0845	5050																			
A14400.00		2.63	11.6	43 F	8.2	130	--	--	8.6	--	0.0	73	--	1.2	--	--	0.0	--	--	47
03/24/66	5000	93	110		8.0				.37			1.20		.03						0
1010	5050																			
A14400.00		2.41	11.0	48 F	8.0	86	--	--	4.2	--	0.0	50	--	0.3	--	--	0.0	--	--	34
04/19/66	5000	63	111		8.4				.18			.82		.01						0
1355	5050																			
A14400.00		2.84	8.6	60 F	7.9	123	12	4.1	7.0	3.1	0.0	72	3.0	0.8	0.8	--	0.0	29	126	47
05/04/66	5000	120	101		8.1		.60	.34	.30	.08		1.18	.06	.02	.01				95	0
1515	5050						45	26	23	6		93	5	2	1					
A14400.00		2.85	9.2	60 F	8.2	145	--	--	8.7	--	0.0	86	--	1.2	--	--	0.0	--	--	57
06/09/66	5000	144	108		8.2				.38			1.41		.03						0
0930	5050																			
A14400.00		2.04	8.6	72 F	8.4	152	--	--	10	--	2.0	85	--	1.3	--	--	0.0	--	--	58
07/05/66	5000	30	115		8.5				.44		.07	1.39		.04						0
1220	5050																			
A14400.00			8.4	64.5F	8.4	213	--	--	16	--	2.0	110	--	4.6	1.5	--	0.1	--	--	75
08/15/66	5000	26	103		8.4				.70		.07	1.80		.13	.02					0
1210	5050																			
A14400.00		1.76	8.0	73 F	8.1	170	14	6.0	11	4.5	0.0	96	6.0	1.5	1.4	--	0.0	35	138	60
09/07/66	5000	12	108		8.4		.70	.49	.48	.12		1.57	.12	.04	.02				126	0
							28	27	27	7		90	7	2	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / D	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
SACRAMENTO RIVER AT KESWICK (12)																				
A21010.00		12.10	9.2	51 F	7.8	107	--	--	5.1	--	0.0	58	4.0	1.4	--	--	0.0	--	--	42
10/04/65	5000	8360	84		7.2				.22			.95	.08	.04						0
1015	5050																			
A21010.00		11.76	9.5	52 F	8.1	108	--	--	5.5	--	0.0	61	4.0	1.4	--	--	0.0	--	--	47
11/01/65	5000	7650	88		7.1				.24			1.00	.08	.04						0
1035	5050																			
A21010.00		8.33	9.1	53 F	8.0	103	--	--	4.6	--	0.0	56	4.0	1.5	--	--	0.0	--	--	41
11/29/65	5000	3750	85		7.0				.20			.92	.08	.04						0
1025	5050																			
A21010.00			10.0	40 F	8.2	126	--	--	7.3	--	0.0	68	5.0	2.0	--	--	0.0	--	--	47
01/03/66	5000	11600	79		7.2				.32			1.12	.10	.06						0
1045	5050																			
A21010.00			10.7	45 F	7.8	101	--	--	4.5	--	0.0	51	6.0	1.5	--	--	0.0	--	--	39
02/07/66	5000	8750	90		7.0				.20			.84	.12	.04						0
1015	5050																			
A21010.00			12.4	45 F	7.9	113	--	--	5.8	--	0.0	55	8.0	1.0	--	--	0.0	--	--	46
03/08/66	5000	4660	104		6.8				.25			.90	.17	.03						1
1145	5050																			
A21010.00			12.5	48 F	8.1	116	--	--	6.0	--	0.0	61	7.0	1.8	--	--	0.1	--	--	45
04/05/66	5000	5270	110		7.1				.26			1.00	.15	.05						0
1110	5050																			
A21010.00			11.9	50 F	7.4	111	9.8	4.7	5.7	1.0	0.0	58	6.0	1.4	0.8	--	0.0	18	74	44
05/03/66	5000	9000	107		7.1		.49	.39	.25	.03		.95	.12	.04	.01				76	0
1240	5050						42	34	22	3		85	11	4	1					
A21010.00			11.3	49 F	8.0	113	--	--	5.5	--	0.0	60	3.0	1.5	--	--	0.0	--	--	45
06/07/66	5000	10200	100		7.2				.24			.98	.06	.04						0
1000	5050																			
A21010.00			10.5	50 F	7.7	113	--	--	6.2	--	0.0	60	5.0	1.6	--	--	0.0	--	--	45
07/11/66	5000	14200	95		7.2				.27			.98	.10	.05						0
1015	5050																			
A21010.00			9.8	50 F	7.9	109	--	--	5.2	--	0.0	60	--	1.5	0.7	--	0.1	--	--	44
08/11/66	5000	13200	88		7.2				.23			.98		.04	.01					0
0745	5050																			
A21010.00			10.1	51 F	8.0	107	9.2	5.0	4.9	0.9	0.0	58	5.0	1.4	0.6	--	0.0	18	69	44
09/13/66	5000	7800	92		7.1		.46	.41	.21	.02		.95	.10	.04	.01				73	0
1010	5050						42	37	19	2		86	9	4	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H.	DO	TEMP	PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE									MILLIGRAMS PER LITER				
			SAT		LAB / FLD	LAB / FLD	CA	MG	NA	K	CO3	MCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
SACRAMENTO RIVER AT DELTA (11)																				
A21300.00		3.72	10.8	53 F	82.0	1560	--	--	11	--	0.0	80	--	7.4	--	--	0.2	--	0.0	550
10/04/65	5000	191	103		8.1				.48			1.31		.21						485
1300	5050																			
A21300.00		3.74	11.3	48 F	8.2	155	--	--	11	--	0.0	82	--	7.3	--	--	.01	--	--	60
11/01/65	5000	197	101		8.1				.48			1.34		.21						0
1325	5050																			
A21300.00		5.56	12.4	43 F	8.1	100	--	--	4.2	--	0.0	55	--	1.8	--	--	0.0	--	--	43
11/29/65	5000	1100	104		7.3				.18			.90		.05						0
1310	5050																			
A21300.00		5.32	13.3	37 F	8.0	100	--	--	5.0	--	0.0	52	--	2.9	--	--	0.0	--	--	40
01/03/66	5000	948	102		7.4				.22			.85		.08						0
1345	5050																			
A21300.00		6.94	12.3	43 F	7.8	81	--	--	3.3	--	0.0	42	--	1.5	--	--	0.0	--	--	34
02/07/66	5000	948	103		7.3				.14			.69		.04						0
1250	5050																			
A21300.00		7.53	12.1	46 F	7.9	80	--	--	3.4	--	0.0	42	--	0.7	--	--	0.0	--	--	34
03/08/66	5000	3290	106		7.2				.15			.69		.02						0
1430	5050																			
A21300.00		7.50	12.0	44 F	8.1	74	--	--	2.2	--	0.0	42	--	0.8	--	--	0.1	--	--	34
04/05/66	5000	3250	102		7.2				.10			.69		.02						0
1000	5050																			
A21300.00		6.41	11.4	48 F	7.8	73	4.0	5.7	2.5	0.3	0.0	42	4.0	0.5	0.1	--	0.1	15	51	34
05/03/66	5000	1480	102		7.3		.20	.47	.11	.01		.69	.08	.01					53	0
1015	5050						25	59	14	1		88	10	1						
A21300.00		4.70	10.9	55 F	8.0	107	--	--	5.1	--	0.0	58	--	2.5	--	--	0.0	--	--	43
06/07/66	5000	540	107		7.6				.22			.95		.07						0
1110	5050																			
A21300.00		4.00	10.0	65 F	8.2	136	--	--	8.7	--	0.0	73	--	5.2	--	--	0.0	--	--	51
07/11/66	5000	285	111		8.2				.38			1.20		.15						0
1320	5050																			
A21300.00		3.73	9.4	73.5F	8.2	149	--	--	10	--	0.0	78	--	6.2	--	--	0.0	--	--	53
08/08/66	5000	194	112		8.2				.44			1.28		.17						0
1400	5050																			
A21300.00		3.69	10.5	60.0F	8.2	153	8.4	7.7	11	1.3	0.0	78	3.0	7.4	0.9	--	0.1	30	108	52
09/13/66	5000	184	109		8.4		.42	.63	.48	.03		1.28	.06	.21	.01				108	0
0705	5050						27	40	31	2		82	4	13	1					

TABLE D 2
MINERAL ANALYSIS OF SURFACE WATER

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
McCLOUD RIVER ABOVE SHASTA LAKE (18)																				
A22150.00		11.21	11.3	48 F	8.2	95	--	--	4.7	--	0.0	54	--	0.8	--	--	0.2	--	--	36
10/04/65	5000	1020	101		7.6				.20			.89		.02						0
1155	5050																			
A22150.00			11.8	46 F	8.0	95	--	--	5.0	--	0.0	54	--	0.9	--	--	0.0	--	--	37
11/01/65	5000	996	103		7.5				.22			.89		.03						0
1200	5050																			
A22150.00		11.90	12.5	45 F	8.0	95	--	--	4.2	--	0.0	51	--	0.9	--	--	0.0	--	--	38
11/29/65	5000	1540	107		7.4				.18			.84		.03						0
1200	5050																			
A22150.00			13.1	39 F	7.9	96	--	--	3.9	--	0.0	51	--	0.7	--	--	0.0	--	--	41
01/03/66	5000	679	103		7.4				.17			.84		.02						0
1210	5050																			
A22150.00			12.1	44 F	8.1	87	--	--	5.6	--	0.0	44	--	0.8	--	--	0.0	--	--	36
02/07/66	5000	1910	103		7.3				.24			.72		.02						0
1140	5050																			
A22150.00			12.6	45 F	8.0	101	--	--	3.8	--	0.0	56	--	0.3	--	--	0.0	--	--	44
03/07/66	5000	954	108		7.2				.17			.92		.01						0
0945	5050																			
A22150.00			11.1	50 F	8.1	95	--	--	3.0	--	0.0	52	--	0.3	--	--	0.0	--	--	42
04/08/66	5000	1160	102		7.2				.13			.85		.01						0
1130	5050																			
A22150.00			10.0	51 F	7.9	112	16	2.4	3.5	0.3	0.0	65	6.0	0.4	0.2	--	0.0	18	76	50
05/03/66	5000	515	105		7.2		.80	.20	.15	.01		1.07	.12	.01					79	0
1130	5050						69	17	13	1		89	10	1						
A22150.00			10.2	54 F	8.2	108	--	--	4.3	--	0.0	62	--	0.6	--	--	0.0	--	--	46
06/07/66	5000	388	99		7.7				.19			1.02		.02						0
1235	5050																			
A22150.00			9.9	63 F	7.4	110	--	--	4.7	--	0.0	64	--	0.9	--	--	0.0	--	--	46
07/07/66	5000		106		8.1				.20			1.05		.03						0
1340	5050																			
A22150.00			10.0	62 F	8.2	111	--	--	5.2	--	--	65	--	1.2	0.6	--	0.0	--	--	47
08/12/66	5000	281	106		7.8				.23			1.07		.03	.01					0
0820	5050																			
A22150.00			10.3	54 F	7.9	110	12	3.6	5.0	1.2	0.0	64	3.0	0.9	1.0	--	0.0	28	81	45
09/13/66	5000	301	100		7.4		.60	.30	.22	.03		1.05	.06	.03	.02				86	0
0830	5050						52	26	19	3		91	5	3	2					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE — CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
STONY CREEK BELOW BLACK BUTTE DAM (13c)																				
A31110.00		3.18	10.0	66 F	8.5	341	--	--	13	--	6.0	172	--	12	1.8	--	0.2	--	--	152
10/07/65	5000	128	108		8.1				.57		.20	2.82		.34	.03					1
0925	5050																			
A31110.00		2.68	11.0	65 F	8.5	362	--	--	14	--	5.0	187	--	14	2.7	--	0.2	--	--	167
11/04/65	5000	61	117		8.1				.61		.17	3.07		.39	.04					5
1130	5050																			
A31110.00		6.52	13.4	44 F	8.1	258	--	--	10	--	0.0	108	--	13	1.4	--	0.0	--	--	104
01/06/66	5000	2840	110		8.1				.44			1.77		.37	.02					16
1120	5050																			
A31110.00		4.85	12.0	46 F	8.2	283	--	--	13	--	0.0	124	--	17	1.9	--	0.2	--	--	113
02/09/66	5000	625	102		7.9				.57			2.03		.48	.03					12
1140	5050																			
A31110.00		2.22	13.1	49 F	8.3	311	--	--	15	--	2.0	134	--	15	--	--	0.2	--	--	127
03/08/66	5000	24	115		8.2				.65		.07	2.20		.42						14
1145	5050																			
A31110.00		3.26	13.3	59 F	8.5	305	--	--	14	--	3.0	134	--	16	0.7	--	0.1	--	--	127
04/06/66	5000	141	132		8.3				.61		.10	2.20		.45	.01					12
1215	5050																			
A31110.00		3.34	9.7	62 F	8.2	288	30	11	13	0.9	0.0	133	18	13	0.4	--	0.1	7.8	168	119
05/04/66	5000	155	100		8.0		1.50	.90	.57	.02		2.18	.37	.37	.01				159	10
1020	5050						50	30	19	1		74	13	13						
A31110.00		4.62	10.6	69 F	8.4	287	--	--	12	--	4.0	130	--	12	--	--	0.1	--	--	121
06/08/66	5000	547	118		7.8				.52		.13	2.13		.34						8
1200	5050																			
A31110.00		4.33	8.9	73 F	8.5	302	--	--	14	--	5.0	142	--	14	1.3	--	0.0	--	--	130
07/13/66	5000	436	103		7.7				.61		.17	2.33		.39	.02					5
0835	5050																			
A31110.00			8.9	76 F	7.9	318	--	--	14	--	0.0	162	--	14	--	--	0.1	--	--	136
08/10/66	5000	388	106		7.9				.61			2.66		.39						3
1000	5050																			
A31110.00		3.10	8.2	69 F	8.2	330	31	15	15	1.2	0.0	173	12	14	1.6	--	0.2	9.4	183	139
09/13/66	5000	112	91		7.9		1.55	1.23	.65	.03		2.84	.25	.39	.03				184	0
1445	5050						45	36	19	1		81	7	11	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STONY CREEK NEAR FRUTO (13f)

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
A31250.00		3.67	10.5	60 F	8.6	345	--	--	13	--	7.0	177	--	13	1.7	--	0.2	--	--	156
10/01/65	5000	311	107						.57		.23	2.90		.37	.03					0
0900	5050																			
A31250.00		3.26	12.0	54 F	8.4	426	--	--	20	--	4.0	214	--	22	2.9	--	0.4	--	--	190
11/01/65	5000	132	113						.87		.13	3.51		.62	.05					8
0915	5050																			
A31250.00		2.87	11.7	41 F	8.4	535	--	--	26	--	5.0	160	--	38	0.4	--	0.0	--	--	224
12/01/65	5000	57	93						1.13		.17	2.62		1.07	.01					85
0930	5050																			
A31250.00		3.30	15.5	40 F	8.4	476	--	--	23	--	3.0	150	--	36	0.5	--	0.0	--	--	188
01/03/66	5000	132	121						1.00		.10	2.46		1.02	.01					60
0930	5050																			
A31250.00		5.10	14.3	42 F	8.0	326	--	--	20	--	0.0	116	--	24	1.9	--	0.1	--	--	118
02/01/66	5000	950	120						.87			1.90		.68	.03					23
0930	5050																			
A31250.00		3.96	15.0	42 F	8.3	305	--	--	15	--	1.0	131	--	12	0.8	--	0.1	--	--	126
03/01/66	5000	336	121						.65		.03	2.15		.34	.01					17
0930	5050																			
A31250.00		5.17	12.6	56 F	8.2	174	--	--	5.7	--	0.0	82	--	4.4	0.6	--	0.1	--	--	76
04/01/66	5000	994	122						.25			1.34		.12	.01					9
0930	5050																			
A31250.00		4.30	9.5	54 F	8.0	207	27	5.2	7.4	1.0	0.0	98	15	4.5	0.2	--	0.0	8.8	126	89
05/02/66	5000	465	94				1.35	.43	.32	.03		1.61	.31	.13					117	9
0830	5050						63	20	15	1		79	15	6						
A31250.00		4.24	9.6	57 F	8.4	262	--	--	11	--	4.0	123	--	12	--	--	0.1	--	--	110
06/01/66	5000	434	94						.48		.13	2.02		.34						3
0800	5050																			
A31250.00		4.13	8.5	65 F	8.5	288	--	--	13	--	4.0	144	--	12	0.9	--	0.1	--	--	120
07/01/66	5000	252	91						.57		.13	2.36		.34	.01					0
0900	5050																			
A31250.00		4.31	8.9	67 F	8.5	298	--	--	13	--	4.0	156	--	12	--	--	0.1	--	--	132
08/16/66	5000	470	98						.57		.13	2.56		.34						0
0830	5050																			
A31250.00		3.94	9.0	69 F	8.4	321	27	17	14	1.0	2.0	169	12	14	0.8	--	0.3	10	180	138
09/01/66	5000	352	101				1.35	1.40	.61	.03	.07	2.77	.25	.39	.01				181	0
0815	5050						40	41	18	1	2	79	7	11						

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
THOMES CREEK NEAR PASKENTA (13d)																				
A32120.00		3.83	10.2	70 F	8.3	522	--	--	13	--	2.0	176	--	20	1.3	--	0.1	--	--	247
10/07/65	5000	8.0	118		8.2				.57		.07	2.89		.56	.02					99
1025	5050																			
A32120.00		3.85	10.3	66 F	8.3	520	--	--	16	--	2.0	156	--	24	2.0	--	0.1	--	--	242
11/04/65	5000	9.2	113		8.3				.70		.07	2.56		.68	.03					111
1230	5050																			
A32120.00		4.56	12.0	47 F	8.4	328	--	--	8.2	--	4.0	134	--	6.0	0.2	--	0.0	--	--	155
12/02/65	5000	66	105		7.9				.36		.13	2.20		.17						39
1120	5050																			
A32120.00		7.25	12.5	43 F	8.1	164	--	--	3.0	--	0.0	74	--	0.9	0.5	--	0.1	--	--	75
01/06/66	5000	2950	103		8.1				.13			1.21		.03	.01					15
1230	5050																			
A32120.00		4.93	12.7	41 F	8.5	281	--	--	6.8	--	4.0	132	--	3.4	0.3	--	0.1	--	--	134
02/09/66	5000	300	102		7.9				.30		.13	2.16		.10						20
1045	5050																			
A32120.00		5.17	12.1	45 F	8.1	223	--	--	5.3	--	0.0	109	--	1.4	--	--	0.1	--	--	104
03/08/66	5000	420	103		7.9				.23			1.79		.04						15
1055	5050																			
A32120.00		5.92	11.1	52 F	8.2	115	--	--	2.6	--	0.0	61	--	0.8	0.3	--	0.1	--	--	53
04/06/66	5000	1020	104		7.7				.11			1.00		.02						3
1105	5050																			
A32120.00		5.32	10.0	57 F	8.1	131	19	3.0	3.0	0.6	0.0	66	11	0.7	0.3	--	0.0	8.2	87	60
05/04/66	5000	490	99		7.6		.95	.25	.13	.02		1.08	.23	.02					78	6
0915	5050						70	19	10	1		81	17	2						
A32120.00		4.23	8.3	77 F	8.3	242	--	--	5.1	--	2.0	112	--	3.0	--	--	0.0	--	--	113
06/08/66	5000	85	102		8.1				.22		.07	1.84		.08						18
1250	5050																			
A32120.00		3.69	9.6	69 F	8.5	367	--	--	8.5	--	6.0	149	--	9.0	1.1	--	0.0	--	--	178
07/13/66	5000	21	109		8.2				.37		.20	2.44		.25	.02					46
0745	5050																			
A32120.00		3.43	9.4	78 F	8.5	408	--	--	11	--	3.0	140	--	14	--	--	0.0	--	--	191
08/10/66	5000	6.6	117		8.4				.48		.10	2.30		.39						71
0925	5050																			
A32120.00		3.55	10.9	74 F	8.4	425	48	16	13	1.3	2.0	109	92	20	1.2	--	0.1	12	308	186
09/13/66	5000	4.9	130		8.4		2.40	1.32	.57	.03	.07	1.79	1.91	.56	.02				259	93
1350	5050						56	31	13	1	2	41	44	13						

TABLE D 2

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TOS SUM	TH NCH
ELDER CREEK NEAR PASKENTA (13e)																				
A33110.00		1.20	9.9	71 F	8.6	744	--	--	60	--	10	217	--	123	--	--	0.1	--	--	248
10/07/65	5000	4.4	113		8.3				2.61		.33	3.56		3.47						54
1145	5050																			
A33110.00		1.22	10.5	64 F	8.7	723	--	--	56	--	16	208	--	117	--	--	0.1	--	--	248
11/02/65	5000	9.3	111		8.4				2.44		.53	3.41		3.30						51
1350	5050																			
A33110.00		1.73	11.9	45 F	8.6	439	--	--	16	--	9.0	207	--	24	--	--	0.0	--	--	204
12/02/65	5000	30	100		8.2				.70		.30	3.39		.68						20
1245	5050																			
A33110.00		4.53	11.4	50 F	8.0	185	--	--	4.7	--	0.0	100	--	1.8	--	--	0.0	--	--	85
01/06/66	5000	875	103		7.9				.20			1.64		.05						3
1400	5050																			
A33110.00		2.29	13.0	39 F	8.6	356	--	--	10	--	9.0	184	--	8.3	--	--	0.1	--	--	174
02/09/66	5000	191	101		8.0				.44		.30	3.02		.23						8
0915	5050																			
A33110.00		2.11	12.1	47 F	8.5	347	--	--	10	--	6.0	181	--	7.8	--	--	0.0	--	--	168
03/08/66	5000	74	105		8.2				.44		.20	2.97		.22						10
0945	5050																			
A33110.00		2.43	11.0	54 F	8.2	166	--	--	5.0	--	0.0	88	--	5.2	--	--	0.0	--	--	75
04/06/66	5000	127	104		7.8				.22			1.44		.15						3
1000	5050																			
A33110.00		2.81	9.4	59 F	8.3	261	23	14	9.4	0.6	2.0	132	9.0	11	0.2	--	0.0	14	145	116
05/04/66	5000		94		8.2		1.15	1.15	.41	.02	.07	2.16	.19	.31					148	5
0835	5050						42	42	15	1	3	79	7	11						
A33110.00		1.48	8.5	84 F	8.7	402	--	--	19	--	12	174	--	30	--	--	0.0	--	--	174
06/08/66	5000		111		8.4				.83		.40	2.85		.85						12
1400	5050																			
A33110.00		1.04	9.8	76 F	8.5	942	43	33	92	1.6	8.0	176	11	207	0.9	--	0.1	14	552	243
09/13/66	5000	2.2	119		8.2		2.15	2.71	4.00	.04	.27	2.89	.23	5.84	.01				497	85
1315	5050						24	30	45		3	31	2	63						

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / D	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE — CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER TDS SUM	TH NCH
CLEAR CREEK NEAR IGO (12d)																				
A36130.00		2.41	10.5	60 F	7.9	95	--	--	3.0	--	0.0	52	--	2.0	--	--	0.0	--	--	54
10/07/65	5000	57	107		8.0				.13			.85		.06						12
1420	5050																			
A36130.00		2.66	11.0	54 F	8.0	94	--	--	2.9	--	0.0	51	--	2.1	--	--	0.0	--	--	44
11/04/65	5000	105	104		7.9				.13			.84		.06						2
1430	5050																			
A36130.00		2.71	12.0	47 F	8.0	88	--	--	3.4	--	0.0	44	--	1.8	--	--	0.0	--	--	37
12/13/65	5000	115	104		7.4				.15			.72		.05						1
1630	5050																			
A36130.00		4.27	12.0	46 F	7.6	58	--	--	3.5	--	0.0	16	--	0.8	--	--	0.0	--	--	21
01/05/66	5000	1150	102		7.2				.16			.26		.02						8
1430	5050																			
A36130.00		6.98	11.8	44 F	7.7	63	--	--	3.8	--	0.0	29	--	1.9	--	--	0.0	--	--	23
02/04/66	5000	4340	104		7.2				.17			.48		.05						0
1450	5050																			
A36130.00		2.82	12.6	45 F	7.9	83	--	--	4.6	--	0.0	40	--	0.9	--	--	0.0	--	--	32
03/02/66	5000	140	106		7.4				.20			.66		.03						0
1350	5050																			
A36130.00		2.60	11.9	53 F	8.0	83	--	--	4.2	--	0.0	40	--	1.6	--	--	0.0	--	--	33
04/13/66	5000	90	111		7.4				.18			.66		.05						0
1245	5050																			
A36130.00		2.38	10.7	57 F	7.7	90	8.0	3.9	4.2	0.5	0.0	43	6.0	2.8	0.9	--	0.0	15	62	36
05/03/66	5000	52	105		7.4		.40	.32	.18	.01		.71	.12	.08	.01				62	1
1000	5050						44	35	20	1		77	13	9	1					
A36130.00		2.34	11.3	53 F	7.9	91	--	--	3.8	--	0.0	46	--	1.9	--	--	0.0	--	--	38
06/03/66	5000	47	106		7.4				.17			.75		.05						1
0925	5050																			
A36130.00		2.29	10.5	62 F	8.0	94	--	--	3.5	--	0.0	48	--	2.2	--	--	0.0	--	--	40
07/07/66	5000	39	109		7.6				.16			.79		.06						1
1015	5050																			
A36130.00		2.30	10.0	61 F	7.7	98	6.7	6.3	3.2	0.5	0.0	50	4.0	1.8	0.4	--	0.0	12	59	42
09/02/66	5000	44	103		7.3		.33	.52	.14	.01		.82	.08	.05	.01				59	1
0945	5050						33	52	14	1		85	8	5	1					

TABLE D 2
MINERAL ANALYSIS OF SURFACE WATER

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. (')	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
BUTTE CREEK NEAR CHICO (84)																				
A41110.00		1.63	10.3	61 F	8.2	111	--	--	3.6	--	0.0	68	--	0.4	--	--	0.0	--	--	51
10/06/65	5000	166	105		7.9				.16			1.12		.01						0
1445	5050											1								
A41110.00		1.38	10.7	55 F	8.2	123	--	--	5.0	--	0.0	74	--	0.5	--	--	0.0	--	--	53
11/03/65	5000	98	101		7.9				.22			1.21		.01						0
1600	5050																			
A41110.00		1.78	12.5	45 F	8.1	101	--	--	3.5	--	0.0	60	--	0.8	--	--	0.1	--	--	46
12/01/65	5000	222	104		7.3				.15			.98		.02						0
1510	5050																			
A41110.00		4.34	12.1	47 F	8.2	68	--	--	2.4	--	0.0	38	--	0.7	--	--	0.1	--	--	28
01/05/66	5000	2210	104		7.1				.10			.62		.02						0
1555	5050																			
A41110.00		2.30	12.6	44 F	8.1	88	--	--	4.1	--	0.0	50	--	0.7	--	--	0.0	--	--	39
02/08/66	5000	475	104		7.3				.18			.82		.02						0
1400	5050																			
A41110.00		2.15	12.7	50 F	8.0	90	--	--	3.2	--	0.0	50	--	0.4	--	--	0.0	--	--	38
03/08/66	5000	395	113		7.6				.14			.82		.01						0
1530	5050																			
A41110.00		2.55	11.6	50 F	7.8	60	--	--	2.3	--	0.0	33	--	0.5	--	--	0.0	--	--	26
04/08/66	5000	634	103		7.6				.10			.54		.01						0
1500	5050																			
A41110.00		2.29	10.1	56 F	7.7	65	7.6	2.2	2.5	0.6	0.0	37	1.0	0.4	0.7	--	0.2	17	48	28
05/04/66	5000	470	97		7.3		.38	.18	.11	.02		.61	.02	.01	.01				50	0
1310	5050						55	26	16	3		94	3	2	2					
A41110.00		1.81	10.3	58 F	8.0	87	--	--	3.7	--	0.0	51	--	0.4	--	--	0.0	--	--	38
06/09/66	5000	234	101		7.6				.16			.84		.01						0
0800	5050																			
A41110.00		1.52	9.8	61 F	8.1	102	--	--	3.4	--	0.0	63	--	0.6	--	--	0.0	--	--	44
07/13/66	5000	134	100		7.8				.15			1.03		.02						0
1100	5050											1								
A41110.00		1.35	9.4	71 F	8.2	108	--	--	4.0	--	0.0	65	--	0.4	--	--	0.0	--	--	48
08/10/66	5000	88	107		8.5				.17			1.07		.01						0
1250	5050																			
A41110.00		1.47	10.6	58 F	7.9	111	12	4.7	3.5	0.9	0.0	67	0.0	0.6	0.6	--	0.0	20	82	50
09/14/66	5000	117	104		7.6		.60	.39	.15	.02		1.10		.02	.01				75	0
0900	5050						52	34	13	2		97		2	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	FC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE — CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
BIG CHICO CREEK NEAR CHICO (85)																				
A42110.00		2.33	9.9	63 F	8.3	206	--	--	13	--	2.0	104	--	9.7	--	--	0.1	--	--	77
10/06/65	5000	25	103		8.1				.57		.07	1.71		.27						0
1345	5050																			
A42110.00		2.36	10.8	55 F	8.2	210	--	--	14	--	0.0	110	--	8.6	--	--	0.1	--	--	76
11/04/65	5000	28	102		7.9				.61			1.80		.24						0
1000	5050																			
A42110.00		2.73	12.5	45 F	8.1	144	--	--	8.2	--	0.0	74	--	5.6	--	--	0.1	--	--	55
12/01/65	5000	59	104		7.5				.36			1.21		.16						0
1600	5050																			
A42110.00		4.47	11.6	49 F	8.4	67	--	--	3.3	--	2.0	33	--	1.1	--	--	0.1	--	--	26
01/06/66	5000	498	102		7.1				.14		.07	.54		.03						0
0940	5050																			
A42110.00		3.54	12.8	44 F	8.1	89	--	--	4.9	--	0.0	47	--	1.5	--	--	0.0	--	--	35
02/08/66	5000	235	105		7.3				.21			.77		.04						0
1505	5050																			
A42110.00		3.03	12.0	51 F	8.0	115	--	--	6.4	--	0.0	61	--	2.3	--	--	0.0	--	--	44
03/08/66	5000	125	108		7.6				.28			1.00		.06						0
1445	5050																			
A42110.00		2.88	10.6	58 F	8.0	122	--	--	6.7	--	0.0	66	--	3.3	--	--	0.0	--	--	49
04/06/66	5000	96	104		7.5				.29			1.08		.09						0
1425	5050																			
A42110.00		2.52	9.8	63 F	8.1	162	14	6.3	9.7	0.9	0.0	84	5.0	6.0	0.6	--	0.2	33	116	61
05/04/66	5000	45	102		7.9		.70	.52	.42	.02		1.38	.10	.17	.01				117	0
1235	5050						42	31	25	1		83	6	10	1					
A42110.00		2.37	9.7	67 F	8.3	192	--	--	14	--	1.0	97	--	9.1	--	--	0.1	--	--	73
06/09/66	5000	31	106		8.1				.61		.03	1.59		.26						0
0900	5050																			
A42110.00		2.27	9.5	70 F	8.4	209	--	--	15	--	3.0	104	--	10	--	--	0.1	--	--	76
07/13/66	5000	24	107		8.2				.65		.10	1.71		.28						0
1015	5050																			
A42110.00		2.20	8.8	75 F	8.2	215	--	--	17	--	0.0	112	--	12	--	--	0.1	--	--	76
08/10/66	5000	19	104		8.4				.74			1.84		.34						0
1210	5050																			
A42110.00		2.16	10.0	63 F	8.2	220	16	8.8	16	1.0	0.0	111	6.0	14	1.2	--	0.1	35	146	76
09/14/66	5000	22	104		7.9		.80	.72	.70	.03		1.82	.12	.39	.02				152	0
0830	5050						36	32	31	1		77	5	17	1					

TABLE D 2
MINERAL ANALYSIS OF SURFACE WATER

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

MILL CREEK NEAR MOUTH (88)

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H.	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE									MILLIGRAMS PER LITER				
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
A44110.00 10/06/65 1420	5000 5050	1.0	10.7 123	72 F	8.2 7.9	206	--	--	15 .65	--	0.0	68 1.12	--	16 .45	--	--	0.5	--	--	63 7
A44110.00 11/03/65 1420	5000 5050	2.0	11.5 109	55 F	8.2 7.9	202	--	--	16 .70	--	0.0	63 1.03	--	18 .51	--	--	0.5	--	--	56 5
A44110.00 12/13/65 1410	5000 5050	70	12.5 107	47 F	8.0 8.0	194	--	--	16 .70	--	0.0	56 .92	--	22 .62	--	--	0.4	--	--	53 7
A44110.00 01/17/66 1230	5000 5050	75	12.7 104	44 F	8.0 7.5	159	--	--	13 .57	--	0.0	54 .89	--	16 .45	--	--	0.4	--	--	50 6
A44110.00 02/10/66 1030	5000 5050	80	13.1 106	43 F	8.0 7.4	129	--	--	7.5 .33	--	0.0	56 .92	--	14 .39	--	--	0.4	--	--	48 2
A44110.00 03/02/66 1110	5000 5050	65	13.6 114	45 F	8.0 7.4	164	--	--	12 .52	--	0.0	56 .92	--	10 .28	--	--	0.4	--	--	48 2
A44110.00 04/12/66 1200	5000 5050	150	11.9 110	53 F	7.7 7.4	99	--	--	7.1 .31	--	0.0	29 .48	--	4.5 .13	--	--	0.2	--	--	28 4
A44110.00 05/02/66 1130	5000 5050	200	11.0 111	60 F	7.5 7.4	117	8.6 .43 41	2.8 .23 22	7.8 .34 33	1.6 .04 4	0.0	32 .52 49	18 .37 35	6.2 .17 16	0.3	--	0.2	25	103 86	33 7
A44110.00 06/02/66 1025	5000 5050		10.0 103	62 F	7.8 7.4	143	--	--	10 .44	--	0.0	37 .61	--	9.6 .27	--	--	0.3	--	--	42 12
A44110.00 07/06/66 0950	5000 5050	2.0	11.6 135	73 F	8.1 7.4	224	--	--	15 .65	--	0.0	80 1.31	--	14 .39	--	--	0.4	--	--	74 9
A44110.00 08/01/66 1000	5000 5050	110	10.9 143	85 F	8.0 8.2	241	--	--	17 .74	--	0.0	88 1.44	--	18 .51	--	--	0.4	--	--	80 8
A44110.00 09/01/66 1300	5000 5050	97	11.0 137	80 F	8.1 7.8	258	18 .90 36	10 .82 32	17 .74 29	2.8 .07 3	0.0	94 1.54 59	21 .44 17	21 .59 23	1.1 .02 1	--	0.5	38	177 175	86 9

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	MCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
ANTELOPE CREEK NEAR RED BLUFF (88e)																				
A45110.50		1.92	10.4	67 F	8.4	154	--	--	10	--	2.0	79	--	7.0	--	--	0.1	--	--	59
10/06/65	5000	40	113		8.1				.44		.07	1.30		.20						0
1320	5050																			
A45110.50		1.95	11.7	51 F	8.3	156	--	--	9.9	--	1.0	82	--	6.1	--	--	0.0	--	--	57
11/03/65	5000	42	106		8.1				.43		.03	1.34		.17						0
1320	5050																			
A45110.50		2.08	12.9	45 F	8.2	151	--	--	9.2	--	0.0	80	--	7.6	--	--	0.0	--	--	57
12/13/65	5000	53	104		8.0				.40			1.31		.21						0
1500	5050																			
A45110.50			13.1	43 F	8.0	118	--	--	7.3	--	0.0	72	--	4.9	--	--	0.0	--	--	50
01/17/66	5000	59	106		7.6				.32			1.18		.14						0
1325	5050											1								
A45110.50			13.0	43 F	8.0	109	--	--	5.6	--	0.0	62	--	2.8	--	--	0.1	--	--	43
02/09/66	5000	124	105		7.4				.24			1.02		.08						0
1440	5050																			
A45110.50			11.8	45 F	8.1	109	--	--	6.5	--	0.0	60	--	3.0	--	--	0.0	--	--	43
03/02/66	5000	130	99		7.2				.28			.98		.08						0
1030	5050																			
A45110.50			11.8	58 F	7.9	75	--	--	4.2	--	0.0	40	--	1.2	--	--	0.0	--	--	28
04/12/66	5000	168	116		7.6				.18			.66		.03						0
1105	5050																			
A45110.50			10.8	61 F	7.9	84	6.6	3.6	4.9	0.8	0.0	50	1.0	1.9	0.3	--	0.0	25	73	32
05/02/66	5000	124	110		7.6		.33	.30	.21	.02		.82	.02	.05					69	0
1045	5050						38	35	24	2		92	2	6						
A45110.50			10.6	64 F	8.2	128	--	--	7.8	--	0.0	69	--	5.3	--	--	0.0	--	--	47
06/02/66	5000	52	112		8.0				.34			1.13		.15						0
0940	5050																			
A45110.50			10.5	76 F	8.2	154	--	--	11	--	0.0	80	--	7.1	--	--	0.1	--	--	54
07/06/66	5000	32	125		8.2				.48			1.31		.20						0
1030	5050																			
A45110.50			9.9	76 F	8.4	163	12	7.4	11	1.3	3.0	82	2.0	6.7	0.1	--	0.1	37	114	60
09/01/66	5000	33	114		8.2		.60	.61	.48	.03	.10	1.34	.04	.19					121	0
1155	5050						35	35	28	2	6	80	2	11						

TABLE D 2
MINERAL ANALYSIS OF SURFACE WATER

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
BATTLE CREEK NEAR COTTONWOOD (88b)																				
AA7110.00		4.09	10.0	54 F	8.3	142	--	--	8.2	--	1.0	83	--	1.3	--	--	0.0	--	--	58
10/07/65	5000	296	98		7.5				.36		.03	1.36		.04						0
1000	5050																			
AA7110.00		4.05	10.8	55 F	8.2	143	--	--	8.1	--	0.0	84	--	1.3	--	--	0.0	--	--	55
11/04/65	5000	325	102		7.6				.35			1.38		.04						0
1020	5050																			
AA7110.00		4.16	12.0	46 F	7.8	138	--	--	7.6	--	0.0	78	--	2.1	--	--	0.0	--	--	52
12/13/65	5000	330	102		7.5				.33			1.28		.06						0
1115	5050																			
AA7110.00		5.18	11.3	46 F	7.7	85	--	--	5.0	--	0.0	46	--	1.6	--	--	0.0	--	--	34
01/05/66	5000	906	96		7.2				.22			.75		.05						0
1550	5050																			
AA7110.00		5.05	11.5	47 F	8.1	93	--	--	4.9	--	0.0	50	--	1.4	--	--	0.1	--	--	36
02/04/66	5000	815	99		7.2				.21			.82		.04						0
1215	5050																			
AA7110.00		4.29	12.2	52 F	8.1	131	--	--	7.1	--	0.0	77	--	0.9	--	--	0.0	--	--	52
03/08/66	5000	375	112		7.4				.31			1.26		.03						0
0945	5050																			
AA7110.00		4.68	11.3	54 F	8.0	100	--	--	5.4	--	0.0	57	--	0.6	--	--	0.0	--	--	38
04/12/66	5000	589	106		7.5				.23			.93		.02						0
1345	5050																			
AA7110.00		4.44	10.6	57 F	7.9	110	8.8	5.4	6.1	1.6	0.0	66	3.0	1.3	0.5	--	0.0	35	101	44
05/02/66	5000	450	103		7.7		.44	.44	.27	.04		1.08	.06	.04	.01				94	0
1410	5050						37	37	23	3		91	5	3	1					
AA7110.00		4.15	10.7	56 F	8.2	125	--	--	7.0	--	0.0	73	--	1.2	--	--	0.0	--	--	48
06/02/66	5000	312	103		7.6				.30			1.20		.03						0
1305	5050																			
AA7110.00		4.17	10.5	62 F	8.2	142	--	--	7.9	--	0.0	84	--	0.1	--	40	0.0	--	--	55
07/06/66	5000	275	108		8.0				.34			1.38								0
1220	5050																			
AA7110.00		4.01	9.5	60 F	8.2	152	10	8.0	9.2	2.3	0.0	91	3.0	1.8	0.1	--	0.0	46	119	58
09/01/66	5000	250	96		7.7		.50	.66	.40	.06		1.49	.06	.05					125	0
0740	5050						31	41	25	4		93	4	3						

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE — CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER TDS SUM	TH NCH
COW CREEK NEAR MILLVILLE (88a)																				
A48110.00		1.90	9.7	67 F	8.3	175	--	--	8.7	--	1.0	89	--	5.5	--	--	0.0	--	--	69
10/07/65	5000	50	106		7.7				.38		.03	1.46		.16						0
1045	5050																			
A48110.00		2.14	10.1	60 F	8.2	162	--	--	8.7	--	0.0	85	--	5.4	--	--	0.0	--	--	63
11/04/65	5000	73	102		7.5				.38			1.39		.15						0
1100	5050																			
A48110.00		7.52	12.6	46 F	8.2	163	--	--	9.0	--	0.0	79	--	8.0	--	--	0.0	--	--	62
12/13/65	5000	4720	107		7.4				.39			1.30		.23						0
1035	5050																			
A48110.00		3.24	12.7	43 F	7.7	118	--	--	6.4	--	0.0	60	--	3.9	--	--	0.0	--	--	51
01/17/66	5000	440	103		7.3				.28			.98		.11						2
1500	5050																			
A48110.00		6.75	12.1	42 F	7.8	69	--	--	3.7	--	0.0	30	--	1.6	--	--	0.1	--	--	25
02/04/66	5000	3720	97		7.2				.16			.49		.05						1
1135	5050																			
A48110.00		3.66	12.7	49 F	7.7	126	--	--	6.6	--	0.0	56	--	2.7	--	--	0.1	--	--	47
03/07/66	5000	660	112		7.4				.29			.92		.08						1
1445	5050																			
A48110.00		4.54	11.0	52 F	7.9	91	--	--	4.5	--	0.0	42	--	1.2	--	--	0.0	--	--	35
04/13/66	5000	1340	101		7.3				.20			.69		.03						1
1410	5050																			
A48110.00		4.13	9.9	61 F	7.9	96	10	3.2	4.7	0.6	0.0	50	5.0	2.0	0.3	--	0.0	22	76	38
05/02/66	5000	388	101		7.4		.50	.26	.20	.02		.82	.10	.06					72	0
1445	5050						51	27	20	2		84	10	6						
A48110.00		2.43	9.6	65 F	8.1	126	--	--	6.4	--	0.0	67	--	3.0	--	--	0.0	--	--	51
06/02/66	5000	148	102		7.6				.28			1.10		.08						0
1335	5050																			
A48110.00		1.44	9.8	81 F	8.2	174	--	--	8.9	--	0.0	94	--	5.2	--	--	0.0	--	--	69
07/06/66	5000	21	123		8.1				.39			1.54		.15						0
1300	5050																			
A48110.00		1.51	6.9	72 F	8.4	208	18	8.7	12	2.0	4.0	108	5.0	7.8	0.5	--	0.0	35	149	81
09/01/66	5000	15	79		7.3		.90	.72	.52	.05	.13	1.77	.10	.22	.01				146	0
0820	5050						41	33	24	2	6	79	4	10						

TABLE D 2
MINERAL ANALYSIS OF SURFACE WATER

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER				MILLIEQUIVALENT PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER			TOS SUM	TH NCH
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2		
A 5 1140.00 FEATHER RIVER NEAR OROVILLE (19)																				
A51140.00		2.37	10.5	--	8.1	101	--	--	3.9	--	0.0	59	--	0.9	--	--	.00	--	--	42
10/08/65 0945	5000	3140	110	63	7.5				.17			.97		.03						0
A51140.00				--	8.0	104	--	--	4.0	--	0.0	62	--	0.7	--	--	.10	--	--	44
10/15/65 0930	5000								.17			1.02		.02						0
A51140.00		2.44	11.4	--	8.1	109	--	--	4.3	--	0.0	63	--	1.0	--	--	.00	--	--	46
11/05/65 1045	5000	3300	111	58	7.5				.19			1.03		.03						0
A51140.00		2.54	13.1	--	7.6	102	--	--	4.2	--	0.0	54	--	1.5	--	--	.00	--	--	42
12/03/65 1300	5000	3520	109	45	7.3				.18			.89		.04						0
A51140.00		3.95	13.4	--	7.9	87	--	--	3.6	--	0.0	45	--	1.1	--	--	.00	--	--	36
01/07/66 1300	5000	7180	110	44	7.5				.16			.74		.03						0
A51140.00		2.34	13.7	--	8.1	118	--	--	4.8	--	0.0	65	--	0.2	--	--	.00	--	--	48
02/11/66 1045	5000	3080	111	43	7.5				.21			1.07		.01						0
A51140.00		3.05	12.5	--	8.0	107	--	--	4.6	--	0.0	59	--	1.1	--	--	.00	--	--	44
03/10/66 1045	5000	4710	109	48	7.3				.20			.97		.03						0
A51140.00		4.65	11.8	--	7.9	67	--	--	2.5	--	0.0	36	--	0.8	--	--	.00	--	--	28
04/07/66 1315	5000	9350	111	54	7.5				.11			.59		.02						0
A51140.00		3.75	11.2	--	7.5	61	6.4	2.3	2.2	0.7	0.0	33	3.0	0.6	0.1	--	.00	10	45	26
05/05/66 0845	5000	6590	109	57	7.3		.32	.19	.10	.02		.54	.06	.02					41	0
							51	30	16	3		87	10	3						
A51140.00		19.	10.2	--	8.1	96	--	--	3.8	--	0.0	55	--	0.7	--	--	.00	--	--	41
06/09/66 1215	5000	2250	109	65	7.7				.17			.90		.02						0
A51140.00		2.20	9.7	--	7.7	104	--	--	4.2	--	0.0	61	--	1.1	--	--	.00	--	--	42
07/14/66 0900	5000	2790	106	67	7.7				.18			1.00		.03						0
A51140.00		2.10	9.4	--	7.3	103	--	--	4.7	--	0.0	60	--	2.0	--	--	.00	--	--	49
08/11/66 1215	5000	2590	110	74	7.9				.20			.98		.06						0
A51140.00			10.1	--	8.4	171	14	12	3.4	0.7	3.0	100	1.6	1.1	0.6	--	.00	--	111	86
09/15/66 1045	5000	1360	105	63	7.7		.70	.99	.17	.02	.10	1.64	.03	.03	.01				86	0
							37	53	9	1	6	91	2	2	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. D	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
A 5 2100.00 FEATHER RIVER, WEST BRANCH, NEAR YANKEE HILL (19d)																				
A52100.00			10.1	--	8.2	155	--	--	4.0	--	0.0	94	--	1.5	--	--	.00	--	--	76
10/15/65	5000		102	59	7.9				.17			1.54		.04						0
1015																				
A52100.00				--	7.9	75	--	--	2.9	--	0.0	40	--	0.5	--	--	.00	--	--	32
11/16/65	5000								.13			.66		.01						0
1230																				
A52100.00			11.2	--	7.9	75	--	--	2.9	--	0.0	40	--	0.5	--	--	.00	--	--	32
11/17/65	5000		105	53	7.3				.13			.66		.01						0
1230																				
A52100.00			12.5	--	7.8	92	--	--	2.9	--	0.0	46	--	1.0	--	--	.00	--	--	41
12/03/65	5000		106	45	7.3				.13			.75		.03						4
1200																				
A52100.00			12.9	--	7.6	78	--	--	2.3	--	0.0	44	--	0.7	--	--	.00	--	--	34
01/12/66	5000		104	42	7.5				.10			.72		.02						0
1240																				
A52100.00			12.3	--	7.9	86	--	--	2.7	--	0.0	48	--	0.8	--	--	.00	--	--	38
02/04/66	5000		105	46	7.5				.12			.79		.02						0
1330																				
A52100.00			12.0	--	7.6	60	--	--	2.3	--	0.0	32	--	0.5	--	--	.02	--	--	25
03/10/66	5000		107	49	7.3				.10			.52		.01						0
1130																				
A52100.00			12.0	--	7.4	34	--	--	1.6	--	0.0	18	--	0.5	--	--	.02	--	--	14
04/07/66	5000		110	51	7.4				.07			.30		.01						0
1130																				
A52100.00			10.9	--	7.2	39	5.6	0.6	1.6	0.4	0.0	22	1.0	0.2	0.7	--	.00	9.7	32	16
05/11/66	5000		102	53	7.3		.28	.05	.07	.01		.36	.02	.01	.01				31	0
1120							68	12	17	2		90	5	3	3					
A52100.00			9.5	--	8.0	73	--	--	2.8	--	0.0	41	--	0.5	--	--	.00	--	--	31
06/09/66	5000		101	64	7.5				.12			.67		.01						0
1015																				
A52100.00			8.2	--	7.6	157	--	--	3.8	--	0.0	97	--	1.9	--	--	.00	--	--	74
07/20/66	5000		99	76	8.1				.17			1.59		.05						0
1145												1								
A52100.00			7.9	--	8.0	169	--	--	4.2	--	0.0	107	--	2.2	--	--	.00	--	--	85
08/11/66	5000		96	76	8.2				.18			1.75		.06						0
1115												1								
A52100.00			8.7	--	8.1	115	11	5.5	4.5	1.2	0.0	67	1.6	1.0	1.4	--	.00	--	76	50
1000							55	37	19	3		94	3	2	2					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. (ft)	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
A 5 3140.00 FEATHER RIVER, NORTH FORK, AT BIG BAR (19a)																				
A53140.00			10.2	--	8.0	104	--	--	4.0	--	0.0	62	--	0.7	--	--	.01	--	--	44
10/15/65	5000		102	57	7.3				.17			1.02		.02						0
0930																				
A53140.00		4.1	11.1	--	8.0	99	--	--	3.8	--	0.0	53	--	0.7	--	--	.00	--	--	42
11/17/65	5000	116	105	52	7.3				.17			.87		.02						0
1145																				
A53140.00		3.8	13.1	--	8.0	106	--	--	3.9	--	0.0	60	--	1.0	--	--	.00	--	--	45
12/03/65	5000	81	111	44	7.5				.17			.98		.03						0
1100																				
A53140.00		3.99	13.1	--	8.1	112	--	--	3.4	--	0.0	72	--	1.0	--	--	.00	--	--	49
01/12/66	5000	103	107	41	7.5				.15			1.18		.03						0
1150												1								
A53140.00			12.9	--	8.1	109	--	--	4.0	--	0.0	62	--	1.2	--	--	.00	--	--	48
02/04/66	5000		108	43	7.5				.17			1.02		.03						0
1245																				
A53140.00		4.1	12.4	--	8.1	94	--	--	3.1	--	0.0	52	--	0.8	--	--	.00	--	--	42
03/23/66	5000	116	111	48	7.6				.13			.85		.02						0
1215																				
A53140.00		9.2	11.6	--	7.7	72	--	--	2.6	--	0.0	40	--	0.6	--	--	.01	--	--	31
04/07/66	5000	2140	87	52	7.3				.11			.66		.02						0
1100																				
A53140.00			11.0	--	7.4	70	7.2	3.0	2.3	0.7	0.0	39	3.0	0.6	0.6	--	.00	12	51	30
05/11/66	5000		109	56	7.5		.36	.25	.10	.02		.64	.06	.02	.01				49	0
1000							49	34	14	3		88	8	3	1					
A53140.00		4.10	10.4	--	8.2	101	--	--	3.8	--	0.0	60	--	0.6	--	--	.00	--	--	45
06/09/66	5000	116	111	62	7.7				.17			.98		.02						0
0930																				
A53140.00			9.9	--	7.1	101	--	--	4.2	--	0.0	60	--	0.7	--	--	.00	--	--	43
07/20/66	5000		115	70	8.1				.18			.98		.02						0
1115																				
A53140.00			9.4	--	7.7	102	--	--	5.0	--	0.0	62	--	2.0	--	--	.00	--	--	42
08/11/66	5000	9.5	115	73	8.1				.22			1.02		.06						0
1015												1								
A53140.00			9.8	--	8.0	117	11	5.2	6.6	1.1	0.0	69	0.3	0.1	4.2	--	.00	--	82	49
09/15/66	5000		106	63	7.7		.55	.43	.29	.03		1.13	.01		.07				62	0
0930							42	33	22	2		93	1		6					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER TDS SUM	TH NCH
A 5 4320.00 INDIAN CREEK NEAR CRESCENT MILLS (17d)																				
A54320.00			9.4	--	7.9	148	--	--	7.8	--	0.0	78	--	2.9	--	--	.01	--	--	57
11/17/65 1030	5000		92	48	7.1				.34			1.28		.08						0
A54320.00		3.27	11.6	--	7.6	147	--	--	7.2	--	0.0	76	--	3.2	--	--	.00	--	--	56
01/12/66 1020	5000	280	94	35	7.1				.31			1.25		.09						0
A54320.00		4.57	11.6	--	8.0	99	--	--	4.9	--	0.0	53	--	1.1	--	--	.00	--	--	40
03/23/66 1100	5000	654	104	42	7.3				.21			.87		.03						0
A54320.00		4.47	8.7	--	7.4	92	14	0.4	4.4	1.3	0.0	50	3.0	0.7	0.6	--	.00	19	78	36
05/11/66 0845	5000	619	93	55	7.3		.70	.03	.19	.03		.82	.06	.02	.01				68	0
							74	3	20	3		90	7	2	1					
A54320.00		1.35	7.7	--	7.1	257	--	--	15	--	0.0	139	--	9.1	--	--	.02	--	--	108
07/20/66 0945	5000	16	97	69	6.9				.65			2.28		.26						0
A54320.00			9.4	--	8.4	256	28	8.3	15	1.8	3.0	143	4.9	6.8	0.8	--	.40	--	158	104
09/13/66 0900	5000		104	58	7.6		1.40	.68	.65	.05	.10	2.35	.10	.19	.01				139	0
							50	24	23	2	4	85	4	7						

TABLE D 2
MINERAL ANALYSIS OF SURFACE WATER

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.M. Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
A 5 5100.00 FEATHER RIVER , MIDDLE FORK, NEAR MERRIMAC (19b)																				
A55100.00		5.85	12.2	--	8.3	156	--	--	7.4	--	1.0	82	--	2.3	--	--	.00	--	--	65
10/01/65 1230	5000	1960	130	60	8.2				.32		.03	1.34		.06						0
A55100.00		5.92	11.4	--	8.2	151	--	--	6.7	--	0.0	71	--	1.6	--	--	.00	--	--	63
11/08/65 1330	5000	2030	118	52	8.1				.29			1.16		.05						5
A55100.00		6.48	12.8	--	7.2	139	--	--	5.6	--	0.0	62	--	2.1	--	--	.00	--	--	58
12/07/65 1400	5000	2660	105	40	7.5				.24			1.02		.06						7
A55100.00			13.2	--	7.6	92	--	--	3.8	--	0.0	46	--	0.9	--	--	.00	--	--	38
01/14/66 1200	5000		110	41	7.5				.17			.75		.03						1
A55100.00			13.6	--	8.0	122	--	--	5.3	--	0.0	65	--	1.7	--	--	.01	--	--	50
03/03/66 1130	5000		115	42	7.1				.23			1.07		.05						0
A55100.00		8.79	11.6	--	7.9	78	--	--	3.3	--	0.0	42	--	0.5	--	--	.00	--	--	33
04/14/66 1300	5000	6220	111	51	7.3				.14			.69		.01						0
A55100.00		8.65	10.7	--	7.5	68	8.4	1.7	2.9	0.7	0.0	36	3.0	0.8	0.5	--	.00	11	50	28
05/11/66 1215	5000	5960	105	53	7.3		.42	.14	.13	.02		.59	.06	.02	.01				47	0
							59	20	13	3		87	9	3	1					
A55100.00		6.75	10.1	--	8.1	91	--	--	3.5	--	0.0	51	--	0.6	--	--	.00	--	--	40
06/02/66 1140	5000	2980	115	66	7.9				.15			.84		.02						0
A55100.00		5.72	9.5	--	8.0	137	--	--	5.4	--	0.0	75	--	2.0	--	--	.00	--	--	61
07/07/66 1200	5000		109	67	8.3				.23			1.23		.06						0
A55100.00		5.40	8.9	--	7.9	153	--	--	6.2	--	0.0	80	--	2.6	--	--	.00	--	--	64
08/04/66 1215	5000	1570	111	75	8.1				.27			1.31		.07						0
A55100.00			9.6	--	7.5	162	19	6.0	6.4	0.9	0.0	80	7.7	3.2	0.5	--	.20	--	122	72
09/02/66 1130	5000	1660	108	65	8.1		.95	.49	.28	.02		1.31	.16	.09	.01				83	7
							55	28	16	1		83	10	6	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / PH FLD	EC LAB / EC FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
A 5 6080.00 FEATHER RIVER, SOUTH FORK, BELOW PONDEROSA DAM (19c)																				
A560R0.00			12.5	--	7.7	42	--	--	3.5	--	0.0	20	--	0.9	--	--	.00	--	--	16
10/01/65	5000		131	62	7.3				.15			.33		.03						0
0930																				
A560R0.00			10.3	--	7.7	48	--	--	2.6	--	0.0	28	--	0.9	--	--	.00	--	--	19
11/08/65	5000		102	57	7.1				.11			.46		.03						0
1105																				
A560R0.00			12.0	--	7.4	44	--	--	2.0	--	0.0	22	--	0.5	--	--	.00	--	--	18
12/07/65	5000		105	47	7.1				.09			.36		.01						0
1045																				
A560R0.00			13.2	--	7.4	53	--	--	2.0	--	0.0	27	--	0.5	--	--	.00	--	--	22
01/14/66	5000		106	41	7.3				.09			.44		.01						0
1050																				
A560R0.00			13.6	--	7.9	55	--	--	2.6	--	0.0	27	--	0.7	--	--	.00	--	--	20
02/04/66	5000		113	43	7.8				.11			.44		.02						0
1015																				
A560R0.00			13.0	--	7.4	70	--	--	3.2	--	0.0	34	--	1.2	--	--	.02	--	--	28
03/03/66	5000		111	45	7.1				.14			.56		.03						0
1030																				
A560R0.00			12.0	--	7.7	48	--	--	2.0	--	0.0	24	--	0.4	--	--	.00	--	--	19
04/14/66	5000		112	52	7.1				.09			.39		.01						0
1015																				
A560R0.00			11.6	--	7.3	39	5.0	0.6	1.8	0.4	0.0	20	1.0	0.6	0.4	--	.00	12	31	15
05/11/66	5000		113	55	7.3		.25	.05	.08	.01		.33	.02	.02	.01				32	0
1030							64	13	21	3		87	5	5	3					
A560R0.00			10.8	--	7.7	46	--	--	2.3	--	0.0	23	--	0.5	--	--	.00	--	--	17
06/02/66	5000		111	60	7.1				.10			.38		.01						0
0900																				
A560R0.00			11.5	--	7.5	44	--	--	1.8	--	0.0	24	--	1.0	--	--	.00	--	--	20
07/07/66	5000		124	64	7.3				.08			.39		.03						1
0930																				
A560R0.00			9.6	--	7.2	43	--	--	2.0	--	0.0	23	--	0.9	--	--	.00	--	--	17
08/04/66	5000		113	72	7.1				.09			.38		.03						0
0930																				
A560R0.00			10.5	--	7.7	41	3.4	1.6	2.0	0.5	0.0	22	0.6	0.0	0.2	--	.10	--	30	15
09/02/66	5000		113	64	7.1		.17	.13	.09	.01		.36	.01						19	0
0930							43	33	23	3		97	3							

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. (')	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
A 6 1180.00 YUBA RIVER NEAR SMARTVILLE (21a)																				
A61100.00		1.82	11.4	--	8.1	109	--	--	3.1	--	0.0	58	--	1.1	--	--	.01	--	--	48
11/05/65 1245	5000	730	118	63	7.5				.13			.95		.03						1
A61100.00		3.05	12.8	--	7.7	99	--	--	3.0	--	0.0	38	--	1.0	--	--	.00	--	--	42
01/07/66 1115	5000	4700	105	44	7.5				.13			.62		.03						11
A61100.00		2.17	13.1	--	7.9	96	--	--	3.1	--	0.0	46	--	1.0	--	--	.00	--	--	40
03/03/66 1500	5000		114	48	7.5				.13			.75		.03						3
A61100.00			10.8	--	7.6	63	8.4	1.5	1.8	0.5	0.0	33	3.0	0.5	0.7	--	.01	13	42	27
05/05/66 1030	5000		106	60	7.3		.42	.12	.08	.01		.54	.06	.01	.01				46	0
							67	19	13	2		87	10	2	2					
A61100.00		1.52	9.2	--	7.8	96	--	--	2.7	--	0.0	53	--	0.0	--	--	.00	--	--	44
07/14/66 1045	5000		105	71	7.7				.12			.87								1
A61100.00			8.7	--	8.2	125	16	3.6	3.2	0.7	0.0	68	5.1	1.5	0.6	--	.00	--	90	55
09/02/66 1415	5000		105	77	7.9		.80	.30	.14	.02		1.12	.11	.04	.01				64	0
							63	24	11	2		88	9	3	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. Q	DO SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
A 7 1110.00 AMERICAN RIVER AT NIMBUS DAM (22a)																				
A71110.00		2.93	9.0	--	7.6	52	--	--	1.7	--	0.0	25	--	1.1	--	--	.00	--	--	20
10/04/65 1530	5000	3130	95	65	7.0				.07			.41		.03						0
A71110.00		2.47	8.4	--	7.6	48	--	--	2.1	--	0.0	18	--	0.9	--	--	.00	--	--	18
11/02/65 1445	5000	2440	84	60	6.5				.04			.30		.03						3
A71110.00		5.45	9.3	--	7.7	60	--	--	2.7	--	0.0	28	--	1.4	--	--	.00	--	--	24
11/30/65 1330	5000	8820	90	57	7.1				.12			.46		.04						1
A71110.00			11.4	--	7.6	63	--	--	2.7	--	0.0	28	--	1.9	--	--	.00	--	--	24
01/05/66 1300	5000		98	48	7.3				.12			.46		.05						1
A71110.00		2.45	11.8	--	7.9	72	--	--	2.9	--	0.0	32	--	1.5	--	--	.00	--	--	28
02/07/66 1300	5000	2680	102	48	7.1				.13			.52		.04						2
A71110.00			12.1	--	7.8	76	--	--	2.9	--	0.0	34	--	2.3	--	--	.01	--	--	30
03/08/66 0900	5000		105	49	7.1				.13			.56		.06						2
A71110.00			11.8	--	7.9	71	--	--	2.5	--	0.0	32	--	2.2	--	--	.00	--	--	28
04/06/66 0800	5000	2500	110	54	7.3				.11			.52		.06						2
A71110.00			10.9	--	7.1	67	7.2	2.3	2.4	0.8	0.0	32	4.0	1.6	0.3	--	.00	9.5	45	28
05/03/66 0645	5000		105	57	7.3		.36	.19	.12	.02		.52	.08	.05					44	2
							52	28	17	3		80	12	8						
A71110.00			10.0	--	7.8	67	--	--	2.8	--	0.0	30	--	1.4	--	--	.00	--	--	26
06/10/66 0715	5000		100	60	7.1				.12			.49		.04						2
A71110.00			9.3	--	7.1	60	--	--	2.2	--	0.0	29	--	2.8	--	--	.00	--	--	26
07/15/66 0745	5000		95	62	7.1				.10			.48		.08						2
A71110.00			9.1	--	7.9	69	--	--	2.2	--	0.0	35	--	1.6	--	--	.00	--	--	28
08/08/66 1115	5000		96	65	7.9				.10			.57		.05						0
A71110.00			9.0	--	7.8	64	9.4	0.8	2.7	0.7	0.0	32	1.5	1.7	0.6	--	.00	--	49	27
09/16/66 1300	5000		97	67	7.1		.47	.07	.12	.02		.52	.03	.05	.01				33	1
							69	10	18	3		85	5	8	2					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H.	DO	TEMP	PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER				MILLIEQUIVALENT PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER				
					LAB / FLD	LAB / FLD	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
A 7 3100.00 AMERICAN RIVER, MIDDLE FORK, NEAR AUBURN (22b)																				
A73100.00		6.26	10.7	--	8.0	110	--	--	3.8	--	0.0	49	--	3.7	--	--	.00	--	--	44
11/02/65 0900	5000		104	56	7.3				.17			.80		.10						4
A73100.00		7.82	12.4	--	7.7	98	--	--	4.7	--	0.0	42	--	1.8	--	--	.00	--	--	41
01/05/66 0920	5000	1000	103	44	7.5				.20			.69		.05						7
A73100.00		7.6	11.2	--	7.8	59	--	--	2.2	--	0.0	28	--	1.2	--	--	.00	--	--	24
03/24/66 1500	5000	860	110	57	7.3				.10			.46		.03						1
A73100.00		6.89	9.8	--	7.4	71	10	0.7	2.5	1.3	0.0	32	5.0	2.0	0.6	--	.00	11	50	28
05/12/66 0755	5000		102	62	7.3		.50	.06	.11	.03		.52	.10	.06	.01				49	2
							71	9	16	4		75	14	9	1					
A73100.00		6.29	8.5	--	7.4	114	--	--	4.1	--	0.0	53	--	5.0	--	--	.00	--	--	48
07/05/66 0745	5000		100	73	7.7				.18			.87		.14						5
A73100.00			9.3	--	8.0	126	15	3.8	3.4	2.2	0.0	57	7.2	3.4	0.5	--	.00	--	83	53
09/19/66 0830	5000		104	68	7.5		.75	.31	.17	.06		.93	.15	.10	.01				64	7
							58	24	13	5		78	13	8	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
A 7 4150.00 AMERICAN RIVER, SOUTH FORK, NEAR LOTUS (22c)																				
A74150.00		3.20	10.7	--	7.8	99	--	--	3.7	--	0.0	48	--	2.9	--	--	.00	--	--	40
11/02/65 0945	5000	1220	101	53	7.3				.16			.79		.08						1
A74150.00		7.17	12.3	--	7.6	59	--	--	2.7	--	0.0	25	--	1.5	--	--	.00	--	--	23
01/05/66 1020	5000	2310	102	44	7.3				.12			.41		.04						3
A74150.00		5.52	11.7	--	7.8	60	--	--	3.1	--	0.0	27	--	2.1	--	--	.01	--	--	23
03/24/66 1245	5000	668	111	54	7.7				.13			.44		.06						1
A74150.00		6.80	10.6	--	6.9	31	3.4	0.4	1.8	0.6	0.0	13	1.0	1.4	0.1	--	.00	9.2	31	10
05/12/66 0920	5000	1850	102	55	7.1		.17	.03	.08	.02		.21	.02	.04					24	0
							57	10	27	7		78	7	15						
A74150.00		4.91	9.8	--	7.3	30	--	--	1.3	--	0.0	15	--	1.0	--	--	.00	--	--	14
07/05/66 0830	5000	349	100	60	7.1				.06			.25		.03						2
A74150.00			10.0	--	7.7	33	3.8	1.3	3.2	0.6	0.0	19	0.0	1.3	2.1	--	.00	--	36	15
09/19/66 0930	5000		104	62	7.2		.19	.11	.14	.02		.31		.04	.03				22	0
							41	24	30	4		82		11	8					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. Q	DO SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
							MILLIGRAMS PER LITER													
A 8 1120.00 CACHE CREEK NEAR CAPAY (80)																				
A81120.00		2.63	8.9	--	8.5	452	--	--	26	--	9.0	207	--	30	--	--	.13	--	--	181
10/05/65 0815	5000	186	95	65	7.9				1.13		.30	3.39		.85						0
A81120.00		4.20	10.4	--	8.1	502	--	--	38	--	0.0	191	--	50	--	--	.21	--	--	170
11/19/65 0930	5000	690	98	56	8.3				1.65			3.13		1.41						14
A81120.00		2.62	10.5	--	8.6	714	--	--	62	--	16	242	--	86	--	--	.29	--	--	241
12/08/65 1300	5000	184	94	50	8.2				2.70		.53	3.97		2.43						16
A81120.00		5.74	11.7	--	8.3	343	--	--	17	--	3.0	167	--	16	--	--	.08	--	--	140
01/13/66 1340	5000	1640	100	47	8.3				.74		.10	2.74		.45						0
A81120.00		3.81	11.9	--	8.6	492	--	--	32	--	8.0	214	--	33	--	--	.11	--	--	193
02/14/66 0930	5000		98	44	8.1				1.39		.27	3.51		.93						4
A81120.00		3.28	10.3	--	8.5	531	--	--	35	--	9.0	224	--	40	--	--	.11	--	--	200
03/24/66 1015	5000	349	100	57	8.1				1.52		.30	3.67		1.13						2
A81120.00		3.18	10.0	--	8.6	531	--	--	38	--	8.0	224	--	39	--	--	.15	--	--	206
04/07/66 0945	5000	320	106	64	8.2				1.65		.27	3.67		1.10						9
A81120.00		3.68	9.6	--	8.2	363	26	20	21	2.2	0.0	188	13	20	1.4	--	.12	20	224	146
05/13/66 1100	5000	478	108	70	8.4		1.30	1.64	.91	.06		3.08	.27	.56	.02				216	0
							33	42	23	2		78	7	14	1					
A81120.00		3.47	9.6	--	7.7	341	--	--	19	--	0.0	164	--	15	--	--	.09	--	--	143
06/03/66 1300	5000	406	109	71	8.6				.83			2.69		.42						9
A81120.00		3.63	8.9	--	8.0	316	--	--	15	--	0.0	181	--	11	--	--	.10	--	--	139
07/15/66 1000	5000	373	98	68	8.3				.65			2.97		.31						0
A81120.00		3.36	7.9	--	8.2	318	--	--	15	--	0.0	176	--	12	--	--	.09	--	--	135
08/09/66 0830	5000	373	95	76	8.2				.65			2.89		.34						0
A81120.00			8.4	--	7.9	387	30	19	21	2.3	0.0	198	7.2	18	1.6	--	1.10	--	224	153
09/20/66 0815	5000	262	94	69	8.2		1.50	1.56	.91	.06		3.25	.15	.51	.03				197	0
							37	39	23	1		82	4	13	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. Q	DO SAT	TEMP	PH LAB / FLD	FC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
A 8 1350.00 CACHE CREEK NEAR LOWER LAKE (42)																				
A81350.00 10/05/65 1245				--	8.5	281	-- 	-- 	11 .48	-- 	6.0 .20	151 2.48	-- 	5.5 .16	-- 	-- 	0.8 	-- 	-- 	127 0
A81350.00 11/03/65 1310				--	8.2	286	-- 	-- 	11 .48	-- 	0.0 	165 2.71	-- 	5.1 .14	-- 	-- 	0.9 	-- 	-- 	127 0
A81350.00 12/09/65 1010				--	7.7	254	-- 	-- 	10 .44	-- 	0.0 	134 2.20	-- 	6.0 .17	-- 	-- 	0.6 	-- 	-- 	110 0
A81350.00 01/07/66 1230				--	7.9	152	-- 	-- 	7.2 .31	-- 	0.0 	66 1.08	-- 	4.1 .12	-- 	-- 	0.1 	-- 	-- 	62 8
A81350.00 02/08/66 1210				--	8.2	270	-- 	-- 	11 .48	-- 	0.0 	152 2.49	-- 	5.7 .16	-- 	-- 	0.8 	-- 	-- 	118 0
A81350.00 03/04/66 1150				--	8.4	280	-- 	-- 	12 .52	-- 	2.0 .07	144 2.36	-- 	9.6 .27	-- 	-- 	0.8 	-- 	-- 	116 0
A81350.00 04/07/66 0814				--	8.2	308	-- 	-- 	14 .61	-- 	0.0 	165 2.71	-- 	8.2 .23	-- 	-- 	0.9 	-- 	-- 	134 0
A81350.00 05/04/66 0930				--	7.6	274	26 1.30 45	13 1.07 37	11 .48 17	1.9 .05 2	0.0 	152 2.49 85	9.0 .19 7	5.4 .15 5	5.8 .09 3	-- 	0.7 	24 	175 171 	120 0
A81350.00 06/07/66 1300				--	8.4	268	-- 	-- 	10 .44	-- 	4.0 .13	148 2.43	-- 	5.4 .15	-- 	-- 	0.7 	-- 	-- 	119 0
A81350.00 07/13/66 0940				--	8.4	274	-- 	-- 	11 .48	-- 	2.0 .07	152 2.49	-- 	5.3 .15	-- 	-- 	0.7 	-- 	-- 	124 0
A81350.00 09/14/66 1130				--	8.0	299	25 1.25 38	17 1.40 43	13 .57 17	2.2 .06 2	0.0 	166 2.72 86	9.0 .19 6	6.2 .17 5	5.7 .09 3	-- 	0.9 	27 	187 187 	132 0

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
A 8 1720.00 CLEAR LAKE AT LAKEPORT (41)																				
A81720.00				--	8.4	269	--	--	10	--	3.0	148	--	5.3	--	--	0.7	--	--	120
10/05/65									.44		.10	2.43		.15						0
1145																				
A81720.00				--	8.1	278	--	--	11	--	0.0	160	--	5.2	--	--	0.8	--	--	124
11/03/65									.48			2.62		.15						0
1100																				
A81720.00				--	8.4	265	--	--	10	--	4.0	145	--	5.8	--	--	0.7	--	--	119
12/09/65									.44		.13	2.38		.16						0
0800																				
A81720.00				--	8.1	197	--	--	7.4	--	0.0	102	--	3.4	--	--	0.4	--	--	84
01/07/66									.32			1.67		.10						1
1000																				
A81720.00				--	8.0	232	--	--	8.8	--	0.0	117	--	4.5	--	--	0.5	--	--	101
02/08/66									.38			1.92		.13						5
0900																				
A81720.00				--	8.3	232	--	--	8.3	--	1.0	119	--	5.0	--	--	0.6	--	--	101
03/04/66									.36		.03	1.95		.14						2
1250																				
A81720.00				--	8.3	238	--	--	9.1	--	1.0	132	--	5.2	--	--	0.4	--	--	106
04/08/66									.40		.03	2.16		.15						0
0730																				
A81720.00				--	8.0	248	22	13	9.4	1.5	0.0	140	9.0	4.6	1.4	--	0.5	22	154	110
05/06/66							1.10	1.07	.41	.04		2.30	.19	.13	.02				152	0
0520							42	41	16	2		87	7	5	1					
A81720.00				--	8.4	253	--	--	9.4	--	2.0	145	--	4.4	--	--	0.5	--	--	112
06/10/66									.43		.07	2.38		.12						0
0620																				
A81720.00				--	7.8	267	--	--	10	--	0.0	152	--	4.8	--	--	0.4	--	--	120
07/21/66									.44			2.49		.14						0
1200																				
A81720.00				--	7.7	240	24	16	11	1.9	0.0	160	9.0	4.6	2.4	--	0.9	29	174	126
09/14/66							1.20	1.32	.48	.05		2.62	.19	.13	.04				177	0
1410							34	43	14	2		86	6	4	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB SAMPLER	G.H. Q	DO SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER TDS SUM	TH NCH
A 8 2050.00 CACHE CREEK, NORTH FORK, NEAR LOWER LAKE (79)																				
A82050.00				--	8.5	595	--	--	34	--	10	215	--	66	--	--	3.9	--	--	226
10/05/65									1.48		.33	3.53		1.86						33
0945																				
A82050.00				--	8.5	615	--	--	34	--	9.0	213	--	75	--	--	4.00	--	--	232
11/03/65	5000								1.70		.30	3.49		2.12						43
A82050.00				--	8.5	615	--	--	34	--	9.0	213	--	75	--	--	4.0	--	--	232
11/03/65									1.70		.30	3.49		2.12						43
0900																				
A82050.00				--	8.5	524	--	--	34	--	8.0	216	--	51	--	--	3.6	--	--	198
12/09/65									1.48		.27	3.54		1.44						8
1240																				
A82050.00				--	8.1	169	--	--	6.8	--	0.0	89	--	4.0	--	--	0.3	--	--	72
01/07/66									.30			1.46		.11						0
1310																				
A82050.00				--	8.3	223	--	--	9.7	--	1.0	120	--	5.8	--	--	0.5	--	--	96
02/08/66									.42		.03	1.97		.16						0
1100																				
A82050.00				--	8.4	309	--	--	13	--	4.0	159	--	7.9	--	--	0.8	--	--	134
03/04/66									.57		.13	2.61		.28						0
1045																				
A82050.00				--	8.5	373	--	--	18	--	5.0	185	--	19	--	--	1.4	--	--	159
04/07/66									.78		.17	3.03		.54						0
1000																				
A82050.00				--	8.5	404	28	24	22	1.1	9.0	191	13	23	0.8	--	1.6	17	236	169
05/04/66							1.40	1.97	.96	.03	.30	3.13	.27	.65	.01				233	0
1045							32	45	22	1	7	72	6	15						
A82050.00				--	8.7	475	--	--	30	--	10	210	--	38	--	--	2.4	--	--	202
06/07/66									1.31		.33	3.44		1.07						14
1400																				
A82050.00				--	8.5	517	--	--	32	--	8.0	212	--	48	--	--	3.2	--	--	206
07/13/66									1.39		.27	3.48		1.35						19
0755																				
A82050.00				--	8.1	613	40	30	34	2.0	0.0	236	21	72	2.1	--	4.1	21	344	224
09/14/66							2.00	2.47	1.70	.05		3.87	.44	2.03	.03				347	31
0930							32	40	27	1		61	7	32						

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. Q	DO SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
A 9 1250.00 PUTAH CREEK NEAR WINTERS (81)																				
A91250.00				--	8.5	293	--	--	7.6	--	5.0	158	--	4.6	--	--	0.1	--	--	142
10/06/65									.33		.17	2.59		.13						4
1415																				
A91250.00				--	8.4	296	--	--	8.2	--	4.0	161	--	4.2	--	--	0.1	--	--	144
11/04/65									.36		.13	2.64		.12						6
1110																				
A91250.00				--	8.6	308	--	--	9.3	--	4.0	166	--	6.4	--	--	.10	--	--	148
12/05/65	5000								.40		.13	2.72		.18						6
1600																				
A91250.00				--	8.6	308	--	--	9.3	--	4.0	166	--	6.4	--	--	0.1	--	--	148
12/09/65									.40		.13	2.72		.18						6
1600																				
A91250.00				--	8.4	325	--	--	11	--	4.0	162	--	7.6	--	--	0.2	--	--	148
01/14/66									.48		.13	2.66		.21						9
0945																				
A91250.00				--	8.5	310	--	--	9.5	--	4.0	164	--	6.4	--	--	0.1	--	--	145
02/09/66									.41		.13	2.69		.18						4
1000																				
A91250.00				--	8.4	305	--	--	8.7	--	4.0	165	--	5.0	--	--	0.2	--	--	145
03/03/66									.38		.13	2.71		.14						3
1430																				
A91250.00				--	8.6	298	--	--	8.5	--	5.0	161	--	4.0	--	--	0.1	--	--	144
04/14/66									.37		.17	2.64		.11						4
1130																				
A91250.00				--	8.3	301	20	23	8.3	1.3	2.0	170	17	4.7	0.3	--	0.1	13	155	146
05/20/66							1.00	1.89	.36	.03	.07	2.79	.35	.13					173	3
0745							30	58	11	1	2	84	10	4						
A91250.00				--	8.6	297	--	--	8.0	--	6.0	161	--	4.6	--	--	0.1	--	--	144
06/17/66									.35		.20	2.64		.13						2
0830																				
A91250.00				--	8.4	296	--	--	8.2	--	4.0	164	--	4.5	--	--	0.0	--	--	146
07/15/66									.36		.13	2.69		.13						5
0805																				
A91250.00				--	8.2	301	17	25	8.2	1.5	0.0	170	17	4.0	0.4	--	0.1	13	170	146
09/06/66							.85	2.06	.36	.04		2.79	.35	.11	.01				170	7
1145							25	62	11	1		86	11	3						

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
B 0 1125.00 COSUMNES RIVER AT McCONNELL (94a)																				
B01125.00		34.87	11.6	--	7.6	129	--	--	5.3	--	0.0	54	--	4.1	--	--	.00	--	--	52
01/06/66 0815	5000	1880	97	46	7.5				.23			.89		.12						8
B01125.00		31.71	10.9	--	8.1	116	--	--	4.8	--	0.0	59	--	2.7	--	--	.00	--	--	48
03/08/66 1000	5000	423	103	55	7.3				.21			.97		.08						0
B01125.00		31.75	9.0	--	7.6	52	5.4	1.7	2.8	0.7	0.0	29	1.0	0.7	0.2	--	.00	15	50	20
05/04/66 1445	5000	435	102	71	7.3		.27	.14	.12	.02		.48	.02	.02					42	0
							49	25	22	4		92	4	4						

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. (')	DO / SAT	TEMP	PH / LAB / FLD	FC / LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
B 0 2520.00 CALAVERAS RIVER NEAR STOCKTON (16B)																				
B02520.00			11.6	--	8.2	178	--	--	5.2	--	0.0	77	--	4.3	--	--	.00	--	--	79
12/06/65	5000		97	46	8.2				.23			1.26		.12						16
1000																				
B02520.00			10.8	--	7.5	205	--	--	7.1	--	0.0	87	--	7.2	--	--	.00	--	--	80
01/06/66	5000		95	50	7.7				.31			1.43		.20						9
1300																				
B02520.00		4.90	11.0	--	7.7	141	--	--	6.2	--	0.0	49	--	5.0	--	--	.02	--	--	50
02/01/66	5000		97	50	7.3				.27			.80		.14						10
1245																				
B02520.00			12.3	--	8.4	212	--	--	7.6	--	1.0	96	--	7.2	--	--	.00	--	--	88
03/01/66	5000		118	57	8.8				.33		.03	1.57		.20						8
1345																				
B02520.00			8.2	--	8.3	195	--	--	6.5	--	1.0	92	--	3.6	--	--	.01	--	--	84
04/13/66	5000		85	63	8.1				.28		.03	1.51		.10						7
0915																				
B02520.00		3.60	9.7	--	7.6	172	19	6.9	8.0	2.2	0.0	89	11	5.0	0.5	--	.00	10	113	76
05/12/66	5000		111	73	8.2		.95	.57	.35	.06		1.46	.23	.14	.01				104	3
1215							52	31	14	3		79	13	8	1					
B02520.00			8.9	--	8.0	190	--	--	7.0	--	0.0	92	--	5.3	--	--	.00	--	--	78
06/01/66	5000		100	71	8.1				.30			1.51		.15						3
1415																				
B02520.00			9.1	--	8.1	170	--	--	5.1	--	0.0	89	--	3.9	--	--	.00	--	--	78
07/12/66	5000		102	70	8.1				.22			1.46		.11						5
0830																				
B02520.00			11.3	--	7.3	184	19	7.9	5.9	1.9	0.0	90	10	4.3	1.1	--	.10	--	119	80
09/01/66	5000		136	77	8.5		.95	.65	.26	.05		1.48	.21	.12	.02				94	6
1415							50	34	14	3		81	11	7	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H.	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
B 0 2590.00 CALAVERAS RIVER AT JENNY LIND (16a)																				
B02590.00		1.39	9.2	--	8.2	154	--	--	5.0	--	0.0	78	--	2.7	--	--	.00	--	--	69
10/13/65	5000	18	93	60	7.3				.22			1.28		.08						5
0815																				
B02590.00		1.32	10.7	--	8.2	157	--	--	4.6	--	0.0	80	--	2.2	--	--	.00	--	--	71
11/09/65	5000	15	104	57	7.7				.20			1.31		.06						6
1000																				
B02590.00		1.50	11.1	--	8.1	181	--	--	5.2	--	0.0	86	--	4.1	--	--	.00	--	--	79
12/06/65	5000	24	99	51	8.2				.23			1.41		.12						9
1115																				
B02590.00		4.46	11.9	--	8.2	175	--	--	4.8	--	0.0	85	--	3.4	--	--	.00	--	--	76
01/06/66	5000	1040	105	49	7.9				.21			1.39		.10						7
1120																				
B02590.00		1.85	11.1	--	8.2	212	--	--	7.7	--	0.0	90	--	6.5	--	--	.02	--	--	89
02/01/66	5000	55	98	49	7.7				.33			1.48		.18						15
1030																				
B02590.00		1.60	10.9	--	8.3	226	--	--	7.1	--	1.0	107	--	5.9	--	--	.01	--	--	100
03/01/66	5000	31	98	51	7.9				.31		.03	1.75		.17						11
1000																				
B02590.00		1.90	12.3	--	8.4	188	--	--	5.7	--	2.0	88	--	2.8	--	--	.00	--	--	84
04/11/66	5000	61	123	59	8.3				.25		.07	1.44		.08						9
1230																				
B02590.00		2.35	11.0	--	8.0	179	20	7.3	5.0	2.1	0.0	89	10	4.1	1.6	--	.00	9.0	116	80
05/04/66	5000	130	102	53	7.7		1.00	.60	.22	.05		1.46	.21	.12	.03				103	7
0830							53	32	12	3		80	12	7	2					
B02590.00		2.22	10.9	--	--	--	--	--	--	--	--	--	--	--	--	--	.00	--	--	--
06/03/66	5000	104	101	53	7.7															
0915																				
B02590.00		2.51	11.3	--	8.3	179	--	--	4.7	--	0.0	94	--	2.9	--	--	.01	--	--	89
07/05/66	5000	108	110	57	8.1				.20			1.54		.08						12
1300																				
B02590.00		2.53	10.3	--	8.0	184	--	--	4.5	--	0.0	91	--	3.8	--	--	.00	--	--	80
08/09/66	5000	172	102	58	7.9				.20			1.49		.11						6
1200																				
B02590.00			11.2	--	7.9	184	21	7.4	4.8	2.1	0.0	90	9.4	3.4	1.3	--	.10	--	120	83
09/01/66	5000	136	106	55	7.7		1.05	.61	.21	.05		1.48	.20	.10	.02				94	9
1015							55	32	11	3		82	11	6	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	D.O.	% SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
B 1 1150.00 COSUMNES RIVER AT MICHIGAN BAR (94)																				
B11150.00		2.38	10.5	--	7.9	90	--	--	4.1	--	0.0	45	--	1.3	--	--	.00	--	--	36
11/02/65	5000	25	105	60	7.5				.18			.74		.04						0
1145																				
B11150.00		4.65	12.5	--	7.4	136	--	--	5.0	--	0.0	60	--	3.6	--	--	.00	--	--	56
01/05/66	5000	1170	107	47	7.7				.22			.98		.10						7
1200																				
B11150.00		3.69	11.8	--	8.2	118	--	--	4.7	--	0.0	58	--	2.7	--	--	.01	--	--	54
03/01/66	5000	395	105	50	7.7				.20			.95		.08						7
1600																				
B11150.00		3.48	9.9	--	7.3	57	6.6	1.5	2.5	0.9	0.0	30	3.0	1.1	0.3	--	.00	15	47	22
05/12/66	5000	302	106	65	7.3		.33	.12	.11	.02		.49	.06	.03					46	0
1100							57	21	18	3		84	10	5						
B11150.00		2.69	8.4	--	7.4	58	--	--	2.7	--	0.0	31	--	1.0	--	--	.00	--	--	22
07/05/66	5000	74	104	79	7.7				.12			.51		.03						0
1030																				
B11150.00			9.8	--	7.6	61	7.4	1.3	3.0	1.1	0.0	32	0.8	0.8	0.6	--	.00	--	58	24
09/16/66	5000	17	116	75	7.9		.37	.11	.13	.03		.52	.02	.02	.01				31	0
1200							58	17	20	5		91	*	4	2					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
B 2 1170.00 MOKELUMNE RIVER BELOW CAMANCHE DAM (23a)																				
B21170.00		6.84	10.1	--	7.6	45	--	--	2.3	--	0.0	20	--	0.8	--	--	.00	--	--	16
11/09/65 0900	5000	1960	105	63	6.7				.10			.33		.02						0
B21170.00		4.79	12.3	--	7.5	50	--	--	3.7	--	0.0	22	--	1.5	--	--	.00	--	--	19
01/06/66 1030	5000	495	107	48	7.3				.16			.36		.04						1
B21170.00		5.74	11.9	--	7.5	48	--	--	2.5	--	0.0	19	--	1.6	--	--	.00	--	--	17
03/01/66 0900	5000	1060	105	49	7.1				.11			.31		.05						2
B21170.00		4.91	11.5	--	7.2	51	5.4	1.1	2.6	0.8	0.0	21	3.0	1.9	0.8	--	.00	9.2	36	18
05/04/66 0745	5000	555	107	53	6.7		.27	.09	.11	.02		.34	.06	.05	.01				35	1
							55	18	22	4		74	13	11	2					
B21170.00		4.54	11.2	--	7.2	58	--	--	2.7	--	0.0	28	--	1.2	--	--	.00	--	--	21
07/05/66 1215	5000	570	117	63	6.9				.12			.46		.03						0
B21170.00			10.2	--	7.7	56	5.6	1.4	3.4	0.9	0.0	25	2.1	2.4	0.3	--	.10	--	45	20
09/01/66 0930	5000	363	106	63	7.1		.28	.12	.15	.02		.41	.04	.07					28	0
							49	21	26	4		79	8	13						

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. Q	DO SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
B 2 5300.00 CALAVERAS RIVER BELOW NEW HOGAN DAM (16c)																				
B25300.00		1.32	13.0	--	8.2	152	--	--	5.0	--	0.0	76	--	2.8	--	--	.01	--	--	67
10/04/65	5000	90							.22			1.25		.08						5
0830																				
B25300.00		0.90	13.3	--	8.4	157	--	--	4.8	--	1.0	83	--	2.8	--	--	.01	--	--	70
11/01/65	5000	25	124	54					.21		.03	1.36		.08						1
0930																				
B25300.00		0.90	12.0	--	8.5	175	--	--	5.1	--	5.0	84	--	3.9	--	--	.00	--	--	78
12/02/65	5000	25	111	52					.22		.17	1.38		.11						1
0915																				
B25300.00		0.90	13.2	--	7.4	180	--	--	5.2	--	0.0	84	--	3.8	--	--	.00	--	--	78
01/03/66	5000	31	116	48					.23			1.38		.11						9
1010																				
B25300.00		0.90	13.7	--	8.2	149	--	--	5.5	--	0.0	89	--	3.3	--	--	.01	--	--	82
02/07/66	5000		119	47					.24			1.46		.09						9
0935																				
B25300.00		0.90	10.8	--	8.1	145	--	--	5.5	--	0.0	88	--	2.2	--	--	.00	--	--	83
03/07/66	5000	30	97	50					.24			1.44		.06						11
0910																				
B25300.00			11.6	--	7.5	134	--	--	5.4	--	0.0	87	--	4.5	--	--	.00	--	--	81
04/04/66	5000	55	107	52					.23			1.43		.13						10
0820																				
B25300.00		1.51		--	7.6	178	21	8.4	5.1	1.8	0.0	87	13	2.2	1.5	--	.00	10	110	79
05/03/66	5000	153		50			1.05	.53	.22	.05		1.43	.27	.06	.02				104	8
0700							57	29	12	3		80	15	3	1					
B25300.00		1.41	11.6	--	8.0	175	--	--	5.1	--	0.0	91	--	3.2	--	--	.00	--	--	82
06/00/66	5000	125	107	52					.22			1.49		.09						8
0710																				
B25300.00				--	8.2	143	--	--	5.5	--	0.0	93	--	3.4	--	--	.00	--	--	82
07/11/66	5000								.24			1.53		.10						6
0800																				
B25300.00		1.48	11.6	--	7.8	142	--	--	5.3	--	0.0	92	--	4.4	--	--	.00	--	--	82
08/08/66	5000		110	54					.23			1.51		.10						7
0815																				
B25300.00				53	8.0	146	21	8.4	5.5	2.1	0.0	94	9.5	3.9	1.4	--	.10	--	110	87
09/12/66	5000						1.05	.69	.24	.05		1.54	.20	.11	.02				98	10
0730							52	34	12	2		82	11	6	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. N	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
B 2 5898.50 CALAVERAS RIVER ABOVE NEW HOGAN RESERVOIR (16d)																				
B25898.50			10.4	--	8.4	262	--	--	9.5	--	3.0	120	--	4.1	--	--	.01	--	--	112
10/04/65	5000		101	56					.41		.10	1.97		.26						9
0745																				
B25898.50			11.9	--	8.2	269	--	--	9.3	--	0.0	133	--	4.2	--	--	.01	--	--	118
11/01/65	5000		111	54					.40			2.18		.26						9
0845																				
B25898.50			13.9	--	8.4	224	--	--	6.8	--	5.0	93	--	6.5	--	--	.00	--	--	98
12/02/65	5000		105	44					.30		.17	1.53		.18						13
0830																				
B25898.50			14.7	--	8.0	180	--	--	5.5	--	0.0	79	--	4.8	--	--	.00	--	--	76
01/03/66	5000		115	40					.24			1.30		.14						11
0935																				
B25898.50			14.8	--	7.7	129	--	--	4.4	--	0.0	59	--	3.0	--	--	.00	--	--	52
02/07/66	5000		120	42					.21			.97		.08						4
0900																				
B25898.50				--	8.2	209	--	--	7.2	--	0.0	102	--	3.9	--	--	.00	--	--	91
03/07/66	5000			52					.31			1.67		.11						8
0840																				
B25898.50			12.6	--	8.2	204	--	--	5.4	--	0.0	105	--	5.3	--	--	.00	--	--	89
04/04/66	5000		132	62					.23			1.72		.15						3
0910																				
B25898.50				--	7.9	220	27	6.9	7.1	1.8	0.0	111	14	4.6	0.3	--	.00	16	138	96
05/03/66	5000			64			1.35	.57	.31	.05		1.82	.29	.13					132	5
0745							59	25	14	2		81	13	6						
B25898.50			8.0	--	8.5	248	--	--	8.6	--	4.0	118	--	5.3	--	--	.00	--	--	109
06/06/66	5000		84	62					.37		.13	1.94		.18						6
0800																				
B25898.50			10.4	--	7.8	283	--	--	10	--	0.0	142	--	7.0	--	--	.00	--	--	126
07/11/66	5000		112	65					.44			2.33		.25						10
0730																				

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. (')	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
B 9 1210.00 SACRAMENTO RIVER AT RIO VISTA (16)																				
B91210.00		4.22	8.3	--	8.2	161	--	--	10	--	0.0	76	--	6.0	--	--	.00	--	--	59
10/06/65	5000		89	66	7.3				.44			1.25		.17						0
1115																				
B91210.00		5.58	8.5	--	8.2	144	--	--	8.3	--	0.0	70	--	4.7	--	--	.01	--	--	53
11/01/65	5000		87	62	7.3				.36			1.15		.13						0
1100																				
B91210.00		4.45	10.2	--	7.8	161	--	--	9.7	--	0.0	70	--	6.9	--	--	.00	--	--	57
11/29/65	5000		94	53	7.5				.42			1.15		.19						0
1245																				
B91210.00		7.80	11.1	--	8.2	179	--	--	11	--	0.0	75	--	8.6	--	--	.01	--	--	60
01/03/66	5000		92	45	7.5				.48			1.23		.24						0
1200																				
B91210.00		2.75	10.7	--	8.2	232	--	--	17	--	0.0	91	--	12	--	--	.02	--	--	78
02/09/66	5000		92	48	7.5				.74			1.49		.34						4
1315																				
B91210.00		4.30	10.6	--	8.2	225	--	--	14	--	0.0	98	--	11	--	--	.01	--	--	81
03/08/66	5000		96	52	7.5				.61			1.61		.31						1
1400																				
B91210.00		4.25	9.4	--	8.1	132	--	--	6.8	--	0.0	61	--	4.6	--	--	.01	--	--	51
04/06/66	5000		96	62	7.3				.30			1.00		.13						1
1330																				
B91210.00		4.30	8.0	--	8.0	164	13	6.0	11	0.9	0.0	68	15	6.5	1.2	--	.00	16	104	57
05/03/66	5000		86	66	7.3		.65	.49	.48	.02		1.12	.31	.18	.02				103	1
1215							40	30	29	1		69	19	11	1					
B91210.00		2.27	7.7	--	8.1	224	--	--	16	--	0.0	94	--	12	--	--	.02	--	--	76
06/08/66	5000		84	68	7.9				.70			1.54		.34						0
1245																				
B91210.00		5.40	8.6	--	7.9	195	--	--	15	--	0.0	75	--	16	--	--	.01	--	--	66
07/12/66	5000		95	69	7.7				.65			1.23		.45						5
1115																				
B91210.00		5.35	8.0	--	7.7	183	--	--	15	--	0.0	85	--	9.8	--	--	.00	--	--	64
08/12/66	5000		91	72	7.7				.65			1.39		.28						0
1045																				
B91210.00			8.2	--	7.4	262	16	11	21	1.5	0.0	108	15	13	2.1	--	.10	--	164	87
09/12/66	5000		90	69	7.8		.80	.90	.91	.04		1.77	.31	.37	.03				133	0
1200							30	34	34	2		71	13	15	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. Q	DO SAT	TEMP	PH LAB / PH FLD	EC LAB / EC FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
B 9 1260.00 LINDSEY SLOUGH NEAR RIO VISTA (110)																				
B91260.00				--	8.3	216	--	--	15	--	1.0	97	--	9.5	--	--	0.0	--	--	77
10/06/65									.65		.03	1.59		.27						0
1230																				
B91260.00				--	8.1	159	--	--	9.3	--	0.0	72	--	5.1	--	--	0.0	--	--	56
11/04/65									.40			1.18		.14						0
1430																				
B91260.00				--	8.0	176	--	--	11	--	0.0	73	--	8.0	--	--	0.2	--	--	62
12/10/65									.48			1.20		.23						2
0830																				
B91260.00				--	7.9	259	--	--	18	--	0.0	103	--	12	--	--	0.3	--	--	90
01/14/66									.78			1.69		.34						6
1230																				
B91260.00				--	8.4	411	--	--	37	--	2.0	139	--	28	--	--	0.6	--	--	123
02/09/66									1.61		.07	2.28		.79						6
1530																				
B91260.00				--	8.3	377	--	--	27	--	2.0	158	--	21	--	--	0.5	--	--	139
03/03/66									1.17		.07	2.59		.59						6
1530																				
B91260.00				--	8.2	262	--	--	18	--	0.0	108	--	23	--	--	0.0	--	--	92
04/14/66									.78			1.77		.65						4
0745																				
B91260.00				--	7.9	238	15	11	16	0.9	0.0	97	21	14	1.5	--	0.1	15	160	82
05/20/66							.75	.90	.70	.02		1.59	.44	.39	.02				142	3
1050							32	38	30	1		65	18	16	1					
B91260.00				--	8.3	253	--	--	17	--	1.0	101	--	14	--	--	0.1	--	--	88
06/17/66									.74		.03	1.66		.39						4
1100																				
B91260.00				--	8.2	237	--	--	17	--	0.0	97	--	12	--	--	0.0	--	--	82
07/15/66									.74			1.59		.34						3
1000																				
B91260.00				--	7.9	235	15	11	17	1.6	0.0	104	15	11	1.6	--	0.1	19	147	82
09/06/66							.75	.90	.74	.04		1.71	.31	.31	.03				142	0
1510							31	37	30	2		72	13	13	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. (ft)	DO SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER: CA	MG	NA	K	MILLIEQUIVALENT PER LITER PERCENT REACTANCE VALUE: CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
B 9 1700.00 DELTA CROSS CHANNEL NEAR WALNUT GROVE (98)																				
A91700.00		3.92	8.2	--	8.2	148	--	--	8.6	--	0.0	72	--	4.6	--	--	.01	--	--	57
10/06/65	5000		87	65	7.3				.37			1.18		.13						0
0830																				
A91700.00		4.78	9.3	--	8.1	134	--	--	7.5	--	0.0	68	--	2.7	--	--	.00	--	--	50
11/01/65	5000		93	60	7.3				.33			1.12		.08						0
1000																				
A91700.00		3.03	10.6	--	8.0	133	--	--	6.9	--	0.0	63	--	4.8	--	--	.00	--	--	51
11/29/65	5000		96	52	7.5				.30			1.03		.14						0
1345																				
A91700.00		4.70	11.4	--	7.8	149	--	--	8.4	--	0.0	71	--	5.5	--	--	.00	--	--	55
01/03/66	5000		94	45	7.5				.36			1.16		.16						0
1330																				
A91700.00		3.58	11.0	--	8.0	153	--	--	7.8	--	0.0	68	--	5.0	--	--	.01	--	--	58
02/09/66	5000		95	48	7.5				.34			1.12		.14						2
1415																				
A91700.00		4.35	10.9	--	8.2	208	--	--	14	--	0.0	90	--	9.4	--	--	.01	--	--	75
03/08/66	5000		100	53	7.5				.61			1.48		.27						1
1445																				
A91700.00		2.85	9.5	--	8.0	121	--	--	7.2	--	0.0	58	--	3.3	--	--	.00	--	--	48
04/06/66	5000		100	65	7.3				.31			.95		.09						1
1430																				
A91700.00		4.30	8.3	--	7.8	129	12	4.4	7.2	1.1	0.0	60	8.0	4.1	0.8	--	.00	16	84	48
05/03/66	5000		90	67	7.3		.60	.36	.31	.03		.98	.17	.12	.01				83	0
1315							46	26	24	2		77	13	9	1					
A91700.00		1.90	7.7	--	8.2	219	--	--	15	--	0.0	95	--	11	--	--	.00	--	--	74
06/08/66	5000		87	71	7.7				.65			1.56		.31						0
1330																				
A91700.00		4.48	8.2	--	7.9	159	--	--	9.8	--	0.0	77	--	4.8	--	--	.00	--	--	61
07/12/66	5000		90	69	7.5				.43			1.26		.25						0
1215																				
A91700.00		4.66	7.4	--	7.5	164	--	--	11	--	0.0	78	--	7.6	--	--	.00	--	--	61
08/12/66	5000		84	72	7.3				.48			1.28		.21						0
1215																				
A91700.00			7.5	--	8.3	244	16	12	17	1.3	0.0	112	13	13	1.5	--	.10	--	151	88
09/12/66	5000		84	70	7.5		.80	.99	.83	.03		1.84	.27	.37	.02				131	0
1415							40	37	31	1		74	11	15	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H.	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
B 9 1849.90 SACRAMENTO RIVER AT FREEPORT (15b)																				
B91849.90		3.27	9.2	--	8.2	152	--	--	19	--	0.0	73	--	5.9	--	--	.00	--	--	56
10/06/65	5000		95	63	7.3				.44			1.20		.17						0
0730																				
B91849.90		2.55	9.7	--	8.1	136	--	--	7.5	--	0.0	68	--	4.0	--	--	.00	--	--	52
11/01/65	5000		96	59	7.3				.33			1.12		.11						0
0900																				
B91849.90		6.08	11.0	--	7.9	132	--	--	7.0	--	0.0	62	--	4.1	--	--	.00	--	--	51
11/29/65	5000		100	52	7.5				.30			1.02		.12						0
1500																				
B91849.90		6.95	11.7	--	8.2	155	--	--	9.0	--	0.0	71	--	4.3	--	--	.00	--	--	56
01/03/66	5000		97	45	7.5				.34			1.16		.12						0
1425																				
B91849.90		8.20	11.1	--	8.1	136	--	--	7.1	--	0.0	60	--	4.8	--	--	.01	--	--	52
02/09/66	5000		96	48	7.5				.31			.98		.14						3
1515																				
B91849.90		3.65	10.9	--	8.2	175	--	--	9.7	--	0.0	80	--	6.0	--	--	.00	--	--	65
03/08/66	5000		100	53	7.4				.42			1.31		.17						0
1530																				
B91849.90		6.10	9.8	--	7.4	103	10	3.6	4.4	0.8	0.0	50	6.0	2.0	0.9	0.1	.00	15	--	40
04/06/66	5000		100	62	7.3		.50	.30	.19	.02		.82	.12	.06	.01				67	0
1530							50	30	19	2		81	12	6	1					
B91849.90		2.60	8.8	--	8.1	143	12	5.4	9.4	1.1	0.0	63	10	5.7	1.3	0.1	.00	16	--	52
05/03/66	5000		96	68	7.3		.60	.44	.41	.03		1.03	.21	.16	.02				92	1
1430							41	30	28	2		73	15	11	1					
B91849.90		2.21	7.9	--	8.3	208	17	7.2	15	1.0	2.0	89	15	10	1.9	0.2	.00	18	--	72
06/08/66	5000		87	69	7.7		.85	.59	.65	.03	.07	1.46	.31	.28	.03				131	0
1445							40	28	31	1	3	68	14	13	1					
B91849.90		2.33	8.9	--	7.9	158	--	--	9.8	--	0.0	76	--	7.1	--	--	.00	--	--	61
07/12/66	5000		98	69	7.7				.43			1.25		.20						0
1345																				
B91849.90		3.13	8.4	--	7.8	165	--	--	12	--	0.0	81	--	7.9	--	--	.00	--	--	61
08/12/66	5000		95	71	7.5				.52			1.33		.22						0
1315																				
B91849.90			8.4	--	8.0	267	18	12	17	1.3	0.0	118	12	15	2.3	--	.00	--	157	93
09/12/66	5000		94	70	7.7		.90	.99	.83	.03		1.94	.25	.42	.04				137	0
1515							33	36	30	1		73	9	16	2					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H.	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE										MILLIGRAMS PER LITER				
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
B 9 4120.10 LITTLE POTATO SLOUGH AT TERMINOUS (99)																				
B94120.10			8.9	--	8.0	132	--	--	14	--	0.0	62	--	4.2	--	--	.00	--	--	48
11/09/65	5000		90	61	7.3				.63			1.02		.12						0
1530																				
B94120.10			10.0	--	7.5	235	--	--	14	--	0.0	58	--	30	--	--	.00	--	--	76
01/03/66	5000		83	45	7.1				.61			.95		.85						29
1255																				
B94120.10			10.6	--	8.1	193	--	--	12	--	0.0	65	--	20	--	--	.00	--	--	65
03/01/66	5000		95	51	7.2				.52			1.07		.56						12
1445																				
B94120.10			8.1	--	7.3	221	15	7.8	14	1.3	0.0	75	15	20	0.5	--	.00	16	138	72
05/12/66	5000		87	67	7.3		.80	.64	.61	.03		1.23	.31	.56	.01				127	11
1220							38	31	29	1		58	15	27						
B94120.10			7.4	--	7.6	204	--	--	14	--	0.0	81	--	17	--	--	.01	--	--	74
07/08/66	5000		84	72	7.3				.61			1.33		.48						8
1230																				
B94120.10			7.5	--	8.1	292	20	11	24	1.7	0.0	122	16	20	1.1	--	.10	--	177	96
09/12/66	5000		87	74	7.3		1.00	.90	1.04	.04		2.00	.33	.56	.02				154	0
1330							34	30	35	1		69	11	19	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER: CA	MG	NA	K	MILLIEQUIVALENT PER LITER PERCENT REACTANCE VALUE: CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
B 9 4300.00 MOKELUMNE RIVER AT WOODBRIDGE (23)																				
B94300.00		13.5	10.0	--	7.5	40	--	--	2.1	--	0.0	19	--	1.0	--	--	.00	--	--	14
11/01/65	5000	1750	103	63	6.7				.09			.31		.03						0
1400																				
B94300.00		7.19	11.6	--	7.4	51	--	--	2.2	--	0.0	22	--	1.3	--	--	.00	--	--	18
01/06/66	5000	401	100	48	7.3				.11			.36		.04						0
0900																				
B94300.00		10.02	11.4	--	7.6	49	--	--	2.5	--	0.0	20	--	.6	--	--	.00	--	--	17
03/08/66	5000	904	103	52	7.1				.11			.33		.05						1
1100																				
B94300.00		3.42	9.6	--	7.4	52	5.2	1.3	3.2	1.1	0.0	22	4.0	1.5	0.6	--	.00	9.3	39	18
05/03/66	5000		98	62	7.0		.26	.11	.14	.03		.36	.08	.04	.01				37	0
1145							48	20	25	6		73	16	8	2					
B94300.00		3.62		--	7.5	59	--	--	2.7	--	0.0	18	--	2.8	--	--	.00	--	--	22
07/12/66	5000	32	8.7						.12			.30		.08						7
0730			94	67	7.1															
B94300.00			9.0	--	7.8	60	6.6	1.1	2.7	0.9	0.0	29	2.3	2.0	0.8	--	.00	--	55	21
09/16/66	5000	34	97	67	7.0		.33	.09	.12	.02		.48	.05	.06	.01				31	0
1015							54	16	21	4		80	8	10	2					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H.	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
B 9 5020.00 SAN JOAQUIN RIVER AT ANTIOCH (28)																				
R95020.00		0.22	8.6	--	8.2	249	--	--	22	--	0.0	91	--	22	--	--	.01	--	--	13
10/06/65	5000		93	67	7.5				.96			1.49		.62						0
0930																				
R95020.00		2.00	8.5	--	8.0	255	--	--	24	--	0.0	76	--	32	--	--	.01	--	--	67
11/01/65	5000		90	65	7.3				1.04			1.25		.90						5
1245																				
R95020.00		1.40	8.8	--	7.9	209	--	--	14	--	0.0	68	--	20	--	--	.00	--	--	62
12/01/65	5000		82	54	7.3				.78			1.12		.56						6
1330																				
R95020.00		3.08	11.0	--	7.9	244	--	--	26	--	0.0	68	--	36	--	--	.01	--	--	74
01/03/66	5000		91	45	7.5				1.13			1.12		1.02						18
1020																				
R95020.00		0.30	10.4	--	8.1	359	--	--	33	--	0.0	80	--	40	--	--	.02	--	--	96
02/09/66	5000		91	49	7.3				1.44			1.31		1.13						31
1115																				
R95020.00		0.90	9.8	--	8.0	348	--	--	34	--	0.0	82	--	41	--	--	.02	--	--	92
03/08/66	5000		93	56	7.3				1.48			1.34		1.16						25
1300																				
R95020.00		2.35	9.0	--	7.9	234	--	--	20	--	0.0	73	--	23	--	--	.00	--	--	70
04/05/66	5000		95	65	7.5				.87			1.20		.65						10
1400																				
R95020.00		1.50	8.7	--	7.4	332	19	5.0	35	1.8	0.0	60	21	56	0.9	--	.00	12	190	68
05/04/66	5000		95	68	7.5		.95	.41	1.65	.05		.98	.44	1.58	.01				183	19
1315							41	13	54	2		33	15	52						
R95020.00		9.55	7.9	--	8.1	1410	--	--	204	--	0.0	78	--	450	--	--	.02	--	--	188
06/08/66	5000		88	70	7.7				8.87			1.28		9.87						124
1130																				
R95020.00		10.88	7.4	--	7.9	4400	--	--	664	--	0.0	90	--	1270	--	--	.04	--	--	484
07/12/66	5000		82	70	7.7				28.88			1.48		35.81						410
1015																				
R95020.00		10.98	7.9	--	7.9	2690	--	--	397	--	0.0	83	--	755	--	--	.02	--	--	301
08/12/66	5000		91	73	7.9				17.27			1.46		21.29						233
0945																				
R95020.00			8.3	--	7.8	961	17	23	124	6.0	0.0	96	43	217	1.5	--	.10	--	524	137
09/14/66	5000		93	70	8.0		.85	1.89	5.41	.15		1.57	.83	6.12	.02				483	59
1315							19	22	60	2		18	10	71						

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. (')	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
B 9 5110.20 OLD RIVER AT MANDEVILLE ISLAND (112)																				
B95110.20		4.58	9.3	--	8.1	247	--	--	20	--	0.0	88	--	20	--	--	.02	--	--	75
10/13/65	5000		100	67	7.5				.87			1.44		.56						3
0945																				
B95110.20		4.20	8.7	--	8.2	293	--	--	26	--	0.0	81	--	32	--	--	.00	--	--	80
11/09/65	5000		90	63	7.3				1.14			1.33		.90						14
1230																				
B95110.20		5.90	8.2	--	7.7	398	--	--	41	--	0.0	80	--	54	--	--	.04	--	--	92
12/06/65	5000		73	51	7.1				1.78			1.31		1.52						27
1345																				
B95110.20		5.70	9.6	--	7.6	428	--	--	39	--	0.0	70	--	52	--	--	.02	--	--	108
01/13/66	5000		81	47	7.3				1.70			1.15		1.47						51
1020																				
B95110.20		6.55	10.6	--	8.1	369	--	--	34	--	0.0	81	--	42	--	--	.05	--	--	98
02/01/66	5000		92	49	7.3				1.48			1.33		1.18						32
1415																				
B95110.20		5.95	10.5	--	7.5	373	--	--	36	--	0.0	82	--	44	--	--	.01	--	--	102
03/01/66	5000		93	50	7.3				1.57			1.34		1.24						35
1215																				
B95110.20		5.40	9.3	--	8.1	187	--	--	13	--	0.0	64	--	10	--	--	.00	--	--	62
04/11/66	5000		96	63	7.5				.57			1.05		.28						10
1015																				
B95110.20		3.40	8.6	--	7.8	157	12	5.6	10	1.1	0.0	61	10	10	0.7	--	.00	14	102	53
05/12/66	5000		94	68	7.5		.60	.46	.44	.03		1.00	.21	.28	.01				93	3
1500							34	30	24	2		67	14	19	1					
B95110.20		3.1	8.0	--	8.2	194	--	--	13	--	0.0	73	--	13	--	--	.00	--	--	63
06/01/66	5000		88	69	7.5				.57			1.20		.37						3
1230																				
B95110.20		5.05		--	7.7	442	--	--	59	--	0.0	79	--	90	--	--	.01	--	--	96
07/08/66	5000			70	7.7				2.57			1.30		2.54						31
0845																				
B95110.20		2.65	6.9	--	7.9	641	--	--	81	--	0.0	81	--	132	--	--	.01	--	--	103
08/02/66	5000		83	77	7.7				3.52			1.33		3.72						37
1345																				
B95110.20			8.8	--	7.8	454	14	18	46	2.7	0.0	83	24	82	1.5	--	.00	--	251	109
09/01/66	5000		100	72	7.9		.70	1.48	2.00	.07		1.36	.50	2.31	.02				229	41
1245							16	35	47	2		32	12	55						

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. ft	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
B 9 5220.00 ROCK SLOUGH NEAR KNIGHTSEN (109)																				
B95220.00		2.35	7.2	--	8.2	280	--	--	25	--	0.0	95	--	24	--	--	.01	--	--	84
10/06/65	5000		79	68	7.3				1.09			1.56		.68						6
1015																				
B95220.00		4.58	6.6	--	8.2	390	--	--	38	--	0.0	99	--	48	--	--	.01	--	--	100
11/04/65	5000		70	65	7.2				1.65			1.62		1.35						19
1330																				
B95220.00		5.36	7.8	--	7.9	572	--	--	63	--	0.0	108	--	85	--	--	.06	--	--	128
12/01/65	5000		71	52	7.1				2.74			1.77		2.40						40
1245																				
B95220.00		5.04	10.4	--	7.9	644	--	--	70	--	0.0	94	--	88	--	--	.04	--	--	144
01/03/66	5000		85	44	7.5				3.05			1.54		2.48						67
1055																				
B95220.00		3.75	10.2	--	8.2	938	--	--	109	--	0.0	128	--	135	--	--	.09	--	--	210
02/08/66	5000		90	50	7.3				4.74			2.10		3.81						105
1430																				
B95220.00		3.20	8.3	--	8.2	825	--	--	91	--	0.0	107	--	124	--	--	.05	--	--	186
03/09/66	5000		79	56	7.3				3.96			1.75		3.50						99
1230																				
B95220.00		3.05	8.2	--	8.0	325	--	--	29	--	0.0	81	--	34	--	--	.01	--	--	90
04/05/66	5000		89	67	7.3				1.26			1.33		.96						24
1330																				
B95220.00		3.65	7.4	--	7.7	172	14	5.1	12	1.1	0.0	61	14	13	0.7	--	.00	14	111	56
05/02/66	5000		82	69	7.3		.70	.42	.52	.03		1.00	.29	.37	.01				104	6
1330							42	25	31	2		60	17	22	1					
B95220.00			7.8	--	8.2	218	--	--	16	--	0.0	81	--	16	--	--	.01	--	--	68
06/08/66	5000		87	70	7.3				.70			1.33		.45						2
1015																				
B95220.00		4.42	7.0	--	7.8	663	--	--	77	--	0.0	84	--	127	--	--	.01	--	--	115
07/13/66	5000		82	75	7.5				3.35			1.38		3.58						46
1500																				
B95220.00		4.60	6.2	--	7.4	761	--	--	98	--	0.0	81	--	167	--	--	.01	--	--	115
08/09/66	5000		76	80	7.4				4.26			1.33		4.71						49
1300																				
B95220.00			8.2	--	8.0	442	16	14	43	2.7	0.0	89	25	73	1.8	--	.00	--	242	97
09/14/66	5000		93	72	7.7		.80	1.15	1.87	.07		1.46	.52	2.06	.03				219	24
1220							21	30	44	2		36	13	51	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
GRANT LINE CANAL AT TRACY ROAD BRIDGE (103a)																				
B95300.00		3.70	9.5	--	8.2	415	--	--	42	--	0.0	92	--	60	--	--	.01	--	--	102
10/07/65	5000		108	72	7.7				1.83			1.51		1.69						27
1415																				
B95300.00		4.80	8.9	--	8.2	377	--	--	40	--	0.0	69	--	56	--	--	.00	--	--	84
11/03/65	5000		92	63	7.3				1.74			1.13		1.58						28
1445																				
B95300.00		5.07	9.2	--	7.9	217	--	--	20	--	0.0	56	--	24	--	--	.01	--	--	56
12/02/65	5000		83	52	7.1				.87			.92		.68						10
1315																				
B95300.00		4.70	11.2	--	7.6	165	--	--	14	--	0.0	48	--	15	--	--	.01	--	--	47
01/04/66	5000		93	45	7.3				.61			.79		.42						8
1030																				
B95300.00		6.10	10.1	--	8.0	476	--	--	52	--	0.0	88	--	67	--	--	.03	--	--	108
02/08/66	5000		89	50	7.3				2.26			1.44		1.89						36
1145																				
B95300.00		3.45	11.0	--	8.1	547	--	--	62	--	0.0	96	--	84	--	--	.02	--	--	126
03/07/66	5000		105	56	7.5				2.70			1.57		2.37						48
1300																				
B95300.00		4.20	15.2	--	8.0	1050	--	--	122	--	0.0	162	--	170	--	--	.04	--	--	240
04/05/66	5000		170	70	8.4				5.31			2.66		4.79						107
1115																				
B95300.00		2.65	12.6	--	7.8	1120	58	28	127	4.6	0.0	182	81	207	1.7	--	.03	11	624	260
05/02/66	5000		142	71	8.6		2.89	2.30	5.52	.12		2.98	1.68	5.84	.03				608	111
1100							27	21	51	1		28	16	55						
B95300.00		5.15	8.2	--	8.6	1130	--	--	125	--	8.0	176	--	215	--	--	.03	--	--	268
06/07/66	5000		90	59	8.5				5.44		.27	2.89		6.06						110
1030																				
B95300.00		10.32	8.7	--	8.5	1160	--	--	130	--	0.8	179	--	222	--	--	.04	--	--	273
07/11/66	5000		101	74	8.7				5.66		.03	2.94		6.26						125
1115																				
B95300.00		10.93	10.9	--	8.0	1130	--	--	125	--	0.0	190	--	209	--	--	.04	--	--	254
08/09/66	5000		137	82	8.7				5.44			3.12		5.89						98
1115																				
B95300.00			12.7	--	8.3	1270	58	34	135	5.4	0.0	209	99	226	4.0	--	.40	--	725	285
09/14/66	5000		142	70	8.5		2.89	2.79	5.87	.14		3.43	2.06	6.37	.06				664	114
0930							25	24	50	1		29	17	53	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. ft	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
B 9 5320.20 OLD RIVER AT ORWOOD BRIDGE (108)																				
B95320.20			7.3	--	8.1	316	--	--	27	--	0.0	94	--	32	--	--	.01	--	--	93
10/14/65 1000	5000		81	68	7.3				1.17			1.54		.90						16
B95320.20			8.8	--	8.2	450	--	--	46	--	0.0	86	--	67	--	--	.01	--	--	105
11/09/65 1415	5000		91	63	7.3				2.00			1.41		1.89						35
B95320.20			9.0	--	7.8	262	--	--	26	--	0.0	58	--	32	--	--	.04	--	--	64
12/06/65 1500	5000		78	49	7.1				1.13			.95		.90						17
B95320.20			10.4	--	7.6	267	--	--	26	--	0.0	56	--	31	--	--	.01	--	--	68
01/06/66 1430	5000		91	49	7.3				1.13			.92		.87						22
B95320.20			9.4	--	8.1	669	--	--	74	--	0.0	88	--	97	--	--	.06	--	--	148
02/09/66 1030	5000		83	50	7.1				3.22			1.44		2.74						76
B95320.20			8.1	--	7.8	786	--	--	84	--	0.0	88	--	113	--	--	.05	--	--	190
03/09/66 1115	5000		76	55	7.1				3.65			1.44		3.19						118
B95320.20			8.5	--	8.2	263	--	--	22	--	0.0	75	--	46	--	--	.00	--	--	78
04/13/66 1145	5000		90	65	7.3				.96			1.23		1.30						17
B95320.20			7.3	--	7.3	175	13	6.0	12	1.1	0.0	61	12	14	0.7	--	.00	14	108	57
05/13/66 0810	5000		80	68	7.3		.65 34	.49 29	.52 31	.03 2		1.00 61	.25 15	.39 24	.01 1				103	7
B95320.20			7.8	--	7.7	206	--	--	15	--	0.0	75	--	15	--	--	.00	--	--	63
06/03/66 1015	5000		85	67	7.3				.65			1.23		.42						2
B95320.20			7.2	--	7.7	454	--	--	50	--	0.0	84	--	76	--	--	.01	--	--	94
07/08/66 1045	5000		85	75	7.5				2.18			1.38		2.14						25
B95320.20			7.2	--	7.9	631	--	--	77	--	0.0	85	--	125	--	--	.00	--	--	114
08/12/66 0900	5000		86	77	7.5				3.35			1.39		3.53						45
B95320.20			8.4	--	7.9	434	20	10	47	2.4	0.0	87	32	69	1.8	--	.10	--	237	93
09/13/66 1245	5000		96	72	7.7		1.00 26	.82 21	2.04 52	.06 2		1.43 35	.67 16	1.95 48	.03 1				225	22

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. (ft)	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
B 9 5340.00 OLD RIVER AT CLIFTON COURT FERRY (104)																				
B95340.00		2.54	9.1	--	8.2	418	--	--	42	--	0.0	91	--	60	--	--	.02	--	--	97
10/07/65	5000		103	71	7.7				1.83			1.49		1.69						23
1130																				
B95340.00		4.12	9.2	--	8.2	411	--	--	43	--	0.0	75	--	64	--	--	.00	--	--	92
11/03/65	5000		96	64	7.3				1.87			1.23		1.80						31
1315																				
B95340.00		5.49		--	7.8	320	--	--	32	--	0.0	72	--	40	--	--	.02	--	--	76
12/02/65	5000			51	7.3				1.39			1.18		1.13						17
1430																				
B95340.00		5.22	10.9	--	7.6	215	--	--	20	--	0.0	52	--	24	--	--	.01	--	--	54
01/04/66	5000		90	45	7.3				.87			.85		.68						12
1145																				
B95340.00		4.70	10.1	--	8.1	552	--	--	62	--	0.0	94	--	79	--	--	.04	--	--	122
02/08/66	5000		90	51	7.3				2.70			1.54		2.23						45
1330																				
B95340.00		3.20	11.3	--	8.2	583	--	--	66	--	0.0	100	--	90	--	--	.02	--	--	130
03/07/66	5000		106	55	7.7				2.87			1.64		2.54						48
1415																				
B95340.00		3.05	8.6	--	8.1	505	--	--	50	--	0.0	92	--	71	--	--	.02	--	--	128
04/05/66	5000		94	68	7.5				2.18			1.51		2.00						53
1245																				
B95340.00		2.25	8.1	--	7.5	328	21	8.6	32	1.5	0.0	77	28	44	1.4	--	.01	13	191	88
05/02/66	5000		92	72	7.7		1.05	.71	1.39	.04		1.26	.58	1.24	.02				187	25
1230							33	22	44	1		41	19	40	1					
B95340.00		3.90	7.1	--	8.2	238	--	--	18	--	0.0	78	--	22	--	--	.01	--	--	72
06/07/66	5000		79	70	7.3				.78			1.28		.62						8
1200																				
B95340.00		10.73	7.3	--	8.0	456	--	--	50	--	0.0	88	--	75	--	--	.01	--	--	99
07/11/66	5000		85	74	7.4				2.14			1.44		2.12						27
1215																				
B95340.00		11.03	6.9	--	7.6	590	--	--	69	--	0.0	81	--	115	--	--	.03	--	--	101
08/09/66	5000		84	78	7.3				3.00			1.33		3.24						35
1215																				
B95340.00			8.5	--	7.5	422	15	14	40	1.6	0.0	89	24	69	0.8	--	.20	--	236	96
09/14/66	5000		95	70	7.7		.80	1.15	1.74	.04		1.46	.50	1.95	.01				209	23
1045							21	31	47	1		37	13	50						

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. Q	DO SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE									MILLIGRAMS PER LITER				
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
B 9 5619.80 SAN JOAQUIN RIVER NEAR RINDGE PUMP (27)																				
B95619.80		0.51	4.6	--	8.3	597	--	--	68	--	3.0	137	--	93	--	--	.01	--	--	130
10/07/65	5000		51	69	7.3				2.96		.10	2.25		2.62						13
0815																				
B95619.80		2.17	7.3	--	8.1	568	--	--	62	--	0.0	110	--	94	--	--	.02	--	--	121
11/03/65	5000		77	65	7.3				2.70			1.80		2.65						31
0915																				
B95619.80		0.72	7.4	--	7.8	334	--	--	35	--	0.0	74	--	42	--	--	.01	--	--	76
12/02/65	5000		66	51	7.1				1.52			1.21		1.18						16
0930																				
B95619.80		4.10	10.1	--	7.2	322	--	--	32	--	0.0	63	--	38	--	--	.02	--	--	77
01/04/66	5000		83	45	7.3				1.39			1.03		1.07						26
1420																				
B95619.80		3.28	8.7	--	7.9	495	--	--	50	--	0.0	85	--	66	--	--	.03	--	--	114
02/08/66	5000		76	49	7.1				2.18			1.39		1.86						45
0915																				
B95619.80		0.70	9.3	--	8.1	730	--	--	85	--	0.0	116	--	110	--	--	.05	--	--	160
03/07/66	5000		88	55	7.3				3.70			1.90		3.10						65
1000																				
B95619.80		1.45	9.0	--	8.2	536	--	--	56	--	0.0	98	--	80	--	--	.02	--	--	128
04/05/66	5000		94	64	7.5				2.44			1.61		2.26						48
0900																				
B95619.80		3.50	9.9	--	7.6	477	26	12	48	2.7	0.0	91	41	73	1.5	--	.01	6.4	274	114
05/02/66	5000		108	68	8.1		1.30	.99	2.09	.07		1.49	.85	2.06	.02				255	40
0800							29	22	47	2		34	19	47						
B95619.80		3.00	7.1	--	8.2	327	--	--	29	--	0.0	90	--	39	--	--	.01	--	--	88
06/07/66	5000		78	69	7.5				1.26			1.48		1.10						14
0800																				
B95619.80		2.73	6.3	--	7.9	344	--	--	31	--	0.0	94	--	44	--	--	.02	--	--	102
07/11/66	5000		74	75	7.3				1.35			1.54		1.24						25
0800																				
B95619.80		3.62	6.3	--	7.8	377	--	--	35	--	0.0	89	--	54	--	--	.00	--	--	93
08/09/66	5000		76	78	7.3				1.52			1.46		1.52						20
0815																				
B95619.80			7.4	--	8.1	411	21	11	37	2.8	0.0	101	18	55	3.3	--	.10	--	229	99
09/16/66	5000		84	71	7.5		1.05	.90	1.61	.07		1.66	.37	1.55	.05				198	16
0915							29	25	44	2		46	10	43	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
B 9 5820.00 SAN JOAQUIN RIVER AT MOSSDALE (102)																				
B95820.00		3.08	8.4	--	8.1	392	--	--	40	--	0.0	91	--	55	--	--	.01	--	--	93
10/07/65	5000		73	69	7.5				1.74			1.49		1.55						19
1015																				
B95820.00		2.20	9.3	--	8.2	452	--	--	48	--	0.0	84	--	69	--	--	.01	--	--	100
11/03/65	5000		95	62	7.3				2.09			1.38		1.95						31
1145																				
B95820.00		5.36	9.5	--	7.7	193	--	--	17	--	0.0	52	--	20	--	--	.01	--	--	52
12/02/65	5000		86	52	7.1				.74			.85		.56						10
1130																				
B95820.00		7.40	11.1	--	7.6	178	--	--	15	--	0.0	50	--	17	--	--	.00	--	--	49
01/04/66	5000		92	45	7.3				.65			.82		.48						8
1305																				
B95820.00		8.50	10.0	--	7.4	385	--	--	41	--	0.0	74	--	48	--	--	.03	--	--	84
02/08/66	5000		88	50	7.3				1.78			1.21		1.35						24
1100																				
B95820.00		2.95	10.8	--	8.2	628	--	--	71	--	0.0	107	--	98	--	--	.02	--	--	139
03/07/66	5000		103	56	7.5				3.09			1.75		2.76						52
1145																				
B95820.00		2.50	15.7	--	8.0	1080	--	--	127	--	0.0	164	--	185	--	--	.04	--	--	244
04/05/66	5000		173	69	8.4				5.52			2.69		5.22						110
1030																				
B95820.00		1.48	16.8	--	7.8	1050	54	27	113	2.6	0.0	180	83	185	4.0	--	.02	17	628	246
05/02/66	5000		191	72	8.8		2.69	2.22	4.92	.07		2.95	1.73	5.22	.06				574	99
1000							27	22	50	1		30	17	52	1					
B95820.00		2.90	14.3	--	8.4	1090	--	--	129	--	6.0	180	--	204	--	--	.02	--	--	254
06/07/66	5000		158	69	8.7				5.61		.20	2.95		5.75						97
0945																				
B95820.00		0.53	13.5	--	8.3	1250	--	--	142	--	0.0	183	--	254	--	--	.04	--	--	273
07/11/66	5000		159	75	8.7				6.18			3.00		7.16						123
1015																				
B95820.00		0.80	15.2	--	8.1	1280	--	--	148	--	0.0	197	--	259	--	--	.04	--	--	281
08/09/66	5000		191	82	7.7				6.44			3.23		7.30						120
1000																				
B95820.00			14.8	--	8.7	1230	57	32	141	5.7	16	178	96	222	4.6	--	.40	--	702	274
09/14/66	5000		158	68	8.7		2.84	2.63	6.13	.15	.53	2.92	2.00	6.26	.07				662	102
0830							24	22	52	1	4	25	17	53	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. Q	DO SAT	TEMP	PH LAB FLD	FC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
SUSAN RIVER AT SUSANVILLE (17b)																				
641600.00		1.20	9.8	51 F	8.5	173	--	--	6.2	--	2.0	104	--	0.5	--	--	0.2	--	--	78
10/06/65	5000	8.5	102		7.8				.27		.07	1.71		.01						0
0955	5050																			
641600.00		1.25	11.1	43 F	8.4	170	--	--	5.8	--	6.0	97	--	0.5	--	--	0.0	--	--	78
11/03/65	5000	9.8	103		7.6				.25		.20	1.59		.01						0
1020	5050																			
641600.00		1.44	12.5	34 F	8.1	158	--	--	5.8	--	0.0	98	--	0.9	--	--	0.0	--	--	71
12/14/65	5000	16	102		7.5				.25			1.61		.03						0
1625	5050											1								
641600.00			12.8	34 F	8.0	138	--	--	5.3	--	0.0	92	--	0.8	--	--	0.0	--	--	68
01/19/66	5000	16	105		7.7				.23			1.51		.02						0
1130	5050											1								
641600.00			12.7	35 F	8.2	155	--	--	5.9	--	0.0	94	--	1.2	--	--	0.0	--	--	67
02/09/66	5000	15	106		7.6				.26			1.54		.03						0
1045	5050																			
641600.00			11.3	43 F	8.2	122	--	--	4.9	--	0.0	69	--	1.0	--	--	0.0	--	--	53
03/24/66	5000	66	106		7.6				.21			1.13		.03						0
1250	5050																			
641600.00			9.9	48 F	8.1	93	--	--	3.9	--	0.0	54	--	0.2	--	--	0.0	--	--	40
04/19/66	5000	117	99		7.4				.17			.89		.01						0
1550	5050																			
641600.00			9.3	55 F	7.6	94	11	3.3	3.4	0.9	0.0	54	2.0	0.4	0.7	--	0.0	22	74	41
05/05/66	5000	87	102		7.7		.55	.27	.17	.02		.89	.04	.01	.01				71	0
1230	5050						54	27	17	2		94	4	1	1					
641600.00			8.9	58 F	7.9	58	--	--	2.1	--	0.0	34	--	0.2	--	--	0.0	--	--	26
06/09/66	5000	141	101		7.3				.09			.56		.01						0
0700	5050																			
641600.00			8.2	75 F	7.9	141	--	--	5.0	--	0.0	89	--	0.2	--	--	0.0	--	--	63
07/05/66	5000	7.5	112		8.0				.22			1.46		.01						0
1405	5050											1								
641600.00			8.5	66 F	8.4	206	--	--	7.2	--	2.0	131	--	0.6	0.6	--	0.0	--	--	95
08/15/66	5000	1.0	105		7.7				.31		.07	2.15		.02	.01					0
0910	5050											1								
641600.00		.68	9.5	66 F	8.3	197	19	10	7.1	2.5	2.0	124	1.0	0.6	0.3	--	0.0	34	142	88
09/07/66	5000	1.9	118		8.1		.95	.82	.31	.06	.07	2.03	.02	.02					137	0
1110	5050						44	38	14	3	3	95	1	1						

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
G 71195.00 TRUCKEE RIVER AT FARAD (53)																				
G71195.00			9.5	--	7.9	78	8.1	2.3	3.8	1.5	0.0	43	0.0	3.0	1.7	--	.10	--	43	35
10/04/65	5000		104	53	7.5		.40	20.02	.17	.04		.71		.08	.03				283	0
1000							2	97	1			87		10	4					
G71195.00			10.3	--	8.0	98	9.5	0.6	5.1	1.4	0.0	40	2.0	0.4	0.6	--	.00	--	51	26
11/15/65	5000		106	47	7.5		.47	.05	.22	.04		.66	.04	.01	.01				39	0
1400							60	6	28	5		92	6	1	1					
G71195.00			10.5	--	8.0	95	9.2	2.4	6.3	1.8	0.0	50	2.8	2.0	0.1	--	.00	--	59	33
11/30/65	5000		99	41	7.3		.46	.20	.27	.05		.82	.06	.06					49	0
1000							47	20	28	5		87	6	6						
G71195.00			11.0	--	7.9	99	10	2.2	6.2	1.4	0.0	52	5.8	2.2	0.0	--	.00	--	62	34
01/10/66	5000		102	4.	7.7		.50	.18	.27	.04		.85	.12	.06					53	0
1440							51	18	27	4		83	12	6						
G71195.00			11.9	--	7.9	106	10	2.9	6.3	1.6	0.0	55	4.1	3.7	0.0	--	.00	--	78	37
02/07/66	5000		101	34	7.3		.50	.24	.27	.04		.90	.09	.10					56	0
1000							48	23	26	4		83	8	9						
G71195.00			10.9	--	--	106	11	3.0	4.7	1.0	--	--	2.6	2.0	0.6	--	.00	--	82	40
03/21/66	5000		107	44	7.9		.55	.25	.20	.03			.05	.06	.01					40
1315																				
G71195.00			11.1	--	--	80	10	1.4	4.1	1.1	--	--	2.3	2.1	0.0	--	.00	--	63	31
04/04/66	5000		112	46	7.7		.50	.12	.18	.03			.05	.06						31
1145																				
G71195.00		980	9.3	--	7.6	62	6.9	1.7	2.7	0.9	0.0	32	2.3	0.6	0.8	--	.00	--	54	24
05/09/66	5000		99	50	7.5		.34	.14	.12	.02		.52	.05	.02	.01				32	0
1240							55	23	14	3		87	4	3	2					
G71195.00		471	9.1	--	7.5	77	8.6	2.0	3.8	1.4	0.0	42	0.2	2.4	0.3	--	.00	--	55	32
06/06/66	5000		101	53	7.5		.43	.21	.17	.04		.69		.07					40	0
0900							51	25	20	5		91		9						
G71195.00		511	8.2	--	7.7	94	9.4	2.6	5.4	1.8	0.0	51	2.4	2.0	0.4	--	.00	--	68	34
07/18/66	5000		104	64	7.1		.47	.21	.23	.05		.84	.06	.06	.01				49	0
1215							49	22	24	5		87	6	6	1					
G71195.00		435	8.5	--	7.4	74	8.7	1.8	4.0	1.2	0.0	42	0.5	0.4	0.0	--	.10	--	68	28
09/07/66	5000		102	59	7.7		.43	.13	.17	.03		.69	.01	.01					37	0
1300							57	17	22	4		97	1	1						

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. / Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
G 7 1600.50 TRUCKEE RIVER NEAR TRUCKEE (52)																				
G71600.50			10.6	--	8.0	105	--	--	5.9	--	0.0	50	--	1.3	--	--	.00	--	--	38
11/15/65	5000		111	47	7.3				.26			.82		.04						0
1230																				
G71600.50			10.5	--	8.1	94	--	--	6.1	--	0.0	50	--	1.2	--	--	.00	--	--	34
01/10/66	5000		101	41	7.7				.27			.82		.03						0
1200																				
G71600.50			10.8	--	8.0	113	--	--	6.1	--	0.0	48	--	4.4	--	--	.00	--	--	40
03/21/66	5000		113	47	7.3				.27			.79		.12						1
1330																				
G71600.50			9.8	--	7.5	63	7.0	1.6	3.2	0.8	0.0	31	4.0	0.7	0.4	--	.00	13	48	24
05/09/66	5000		103	47	7.3		.35	.13	.14	.02		.51	.08	.02	.01				46	0
1140							55	20	22	3		82	13	3	2					
G71600.50			8.2	--	7.7	93	--	--	6.0	--	0.0	53	--	2.8	--	--	.00	--	--	35
07/18/66	5000		105	63	7.7				.26			.87		.08						0
1145																				
G71600.50			8.6	--	7.8	110	9.7	4.4	6.8	1.4	0.0	60	5.9	2.8	0.8	--	.00	--	76	42
09/07/66	5000		110	63	7.9		.48	.36	.30	.04		.98	.12	.08	.01				61	0
1045							41	31	25	3		82	10	7	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. Q	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER TDS SUM	TH NCH
G 7 1710.00 LAKE TAHOE AT TAHOE CITY (38)																				
G71710.00		8.10	9.4	--	8.0	91	--	--	5.9	--	0.0	48	--	1.0	--	--	.00	--	--	32
11/15/65	5000		104	50	7.5				.26			.79		.03						0
1300																				
G71710.00		7.8	10.2	--	8.0	92	--	--	5.7	--	0.0	50	--	1.1	--	--	.00	--	--	32
01/10/66	5000		101	42	7.5				.25			.82		.03						0
1315																				
G71710.00		7.34	10.0	--	8.0	95	--	--	6.4	--	0.0	50	--	1.6	--	--	.00	--	--	32
03/21/66	5000		101	43	7.5				.28			.82		.05						0
1130																				
G71710.00		7.82	9.4	--	7.8	90	9.2	2.2	6.1	1.5	0.0	50	1.0	1.5	0.1	--	.00	11	58	32
05/09/66	5000		104	50	7.7		.46	.18	.27	.04		.82	.02	.04					57	0
1055							48	19	28	4		93	2	5						
G71710.00		7.60	8.5	--	7.8	92	--	--	6.3	--	0.0	54	--	1.3	--	--	.00	--	--	37
07/18/66	5000		109	61	7.7				.27			.89		.04						0
1100																				
G71710.00			8.1	--	7.7	95	8.4	4.4	6.2	1.3	0.0	53	3.6	2.0	1.1	--	.00	--	62	39
09/07/66	5000		106	64	8.0		.42	.36	.27	.03		.87	.07	.06	.02				53	0
1130							39	33	25	3		85	7	6	2					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. (')	DO / SAT	TEMP	PH / LAB / FLD	EC / LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIFOUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
G 8 2300.00 CARSON RIVER, WEST FORK, AT WOODFORDS (115a)																				
G82300.00			10.9	--	7.9	74	--	--	3.4	--	0.0	40	--	0.4	--	--	.00	--	--	28
11/16/65 0945	5000		104	40	7.3				.15			.66		.01						0
G82300.00			11.9	--	7.7	73	--	--	3.5	--	0.0	39	--	0.2	--	--	.00	--	--	27
01/11/66 0930	5000	34	101	33	7.3				.15			.64		.01						0
G82300.00			10.8	--	7.9	70	--	--	3.6	--	0.0	39	--	0.3	--	--	.00	--	--	31
03/22/66 1245	5000	46	104	41	7.3				.16			.64		.01						0
G82300.00			9.9	--	7.4	46	6.0	1.0	1.9	0.5	0.0	25	1.0	0.2	0.3	--	.00	12	41	19
05/10/66 0755	5000	216	98	43	7.3		.30	.08	.08	.01		.41	.02	.01					35	0
							64	17	17	2		93	5	2						
G82300.00			8.2	--	7.0	65	--	--	2.6	--	0.0	36	--	0.0	--	--	.00	--	--	29
07/19/66 1200	5000	52	106	64	7.5				.11			.59								0
G82300.00			9.0	--	8.1	87	8.5	2.6	4.5	1.6	0.0	54	2.5	0.4	0.7	--	.40	--	71	32
09/08/66 1215	5000	16	110	59	7.5		.43	.21	.20	.04		.89	.05	.01	.01				48	0
							49	24	23	5		93	5	1	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H.	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
G 8 3420.20 CARSON RIVER, EAST FORK, NEAR MARKLEVILLE (115)																				
GB3420.20			11.2	--	8.1	126	--	--	8.1	--	0.0	61	--	2.2	--	--	.00	--	--	45
11/16/65	5000		104	39	7.5				.35			1.00		.06						0
1015																				
GB3420.20			12.3	--	8.0	159	--	--	8.4	--	0.0	72	--	2.0	--	--	.20	--	--	58
01/11/66	5000		103	32	7.7				.34			1.18		.06						0
1015																				
GB3420.20			10.8	--	8.2	140	--	--	9.0	--	0.0	67	--	2.3	--	--	.20	--	--	50
03/22/66	5000		106	43	7.9				.39			1.10		.06						0
1315																				
GB3420.20			10.0	--	7.2	61	5.8	1.5	3.4	0.9	0.0	32	3.0	0.5	0.2	--	.00	14	52	22
05/10/66	5000		100	44	7.3		.33	.12	.17	.02		.52	.06	.01					46	0
0840							52	19	27	3		88	10	2						
GB3420.20			8.1	--	7.9	90	--	--	5.2	--	0.0	50	--	2.0	--	--	.00	--	--	34
07/19/66	5000		105	65	8.1				.23			.82		.06						0
1115																				
GB3420.20			8.6	--	7.7	156	15	6.1	8.4	2.0	0.0	88	5.1	2.2	1.0	--	.50	--	109	65
09/08/66	5000		105	61	8.3		.80	.50	.36	.05		1.44	.11	.06	.02				85	0
1130							45	29	22	3		88	7	4	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	G.H. (FT)	DO / SAT	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER: TDS SUM	TH NCH
G 9 2400.00 WALKER RIVER, WEST, NEAR COLEVILLE (116)																				
G92400.00			11.0	--	8.1	111	--	--	7.0	--	0.0	60	--	0.7	--	--	.00	--	--	40
11/16/65	5000		107	39	7.3				.30			.98		.02						0
1145																				
G92400.00		172	12.2	--	8.0	110	--	--	6.0	--	0.0	60	--	0.8	--	--	.00	--	--	40
01/11/66	5000		108	33	7.3				.26			.98		.02						0
1210																				
G92400.00		216	11.5	--	8.1	105	--	--	5.4	--	0.0	57	--	0.8	--	--	.00	--	--	40
03/22/66	5000		112	39	7.5				.23			.93		.02						0
1115																				
G92400.00		754	10.0	--	7.5	42	5.6	0.7	1.4	0.5	0.0	23	1.0	0.2	0.2	--	.00	6.5	33	17
05/10/66	5000		102	42	7.3		.28	.06	.06	.01		.38	.02	.01					28	0
0955							65	14	14	2		93	5	2						
G92400.00		193	8.7	--	7.2	79	--	--	4.7	--	0.0	44	--	1.0	--	--	.00	--	--	35
07/19/66	5000		109	58	7.6				.20			.72		.03						0
0945																				
G92400.00		134	10.0	--	8.2	154	14	3.6	7.4	0.9	0.0	86	4.3	1.6	0.8	--	.60	--	97	60
09/08/66	5000		115	54	8.1		.90	.30	.34	.02		1.41	.09	.05	.01				80	0
1015							56	19	22	1		90	5	3	1					

TABLE D 2

MINERAL ANALYSIS OF SURFACE WATER

STATION NUMBER / DATE / TIME	LAB / SAMPLER	WATER TEMP	DO SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER TDS SUM	TH NCH
G 9 3200.00 WALKER RIVER, EAST, NEAR BRIDGEPORT (116a)																				
G93200.00			9.5	--	8.2	193	--	--	10	--	0.0	105	--	0.7	--	--	.00	--	--	75
11/16/65 1245	5000		97	43	7.9				.44			1.72		.02						0
G93200.00		143	9.7	--	8.2	229	--	--	14	--	0.0	122	--	2.0	--	--	.10	--	--	82
01/11/66 1310	5000	143	96	41	7.9				.61			2.00		.06						0
G93200.00		71	10.2	--	8.2	216	--	--	17	--	0.0	110	--	2.7	--	--	.10	--	--	70
03/22/66 1000	5000	71	102	42	7.8				.74			1.80		.08						0
G93200.00		256	8.1	--	7.7	210	24	3.6	14	2.8	0.0	115	11	1.9	0.5	--	.10	14	132	75
05/10/66 1100	5000	256	98	56	7.9		1.20	.30	.61	.07		1.89	.23	.05	.01				128	0
							65	14	24	3		87	11	2						
G93200.00			7.4	--	8.0	215	--	--	13	--	0.0	123	--	2.2	--	--	.10	--	--	87
07/19/66 0845	5000	248	100	65	8.7				.57			2.02		.06						0
G93200.00			7.5	--	8.0	251	29	5.0	15	4.3	0.0	139	11	1.0	3.5	--	.80	--	172	93
09/08/66 0915	5000	201	99	63	8.3		1.45	.41	.65	.11		2.28	.23	.03	.06				138	0
							55	16	25	4		88	9	1	2					

TABLE D-3
TRACE ELEMENT ANALYSES OF SURFACE WATER
Northeastern California

STATION	STATION NUMBER	DATE 1966	CONSTITUENTS IN MICROGRAMS PER LITER																
			(Al)	(Be)	(Bi)	(Cd)	(Co)	(Cr)	(Cu)	(Fe)	(Ga)	(Ge)	(Mn)	(Mo)	(Ni)	(Pb)	(Tl)	(V)	(Zn)
American River at Nimbus Dam (22a)	A7 1110.00	9/16	15	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	12	5.7*	0.29*	1.4*	0.29*	2.7	1.4*	0.57*	0.6	5.7*
American River at Sacramento (22)	A0 7140.00	9/16	13	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	15	5.7*	0.29*	1.4*	0.29*	1.8	1.4*	0.57*	0.7	5.7*
Bear River near Wheatland (78)	A0 6550.00	9/15	9.7	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	40	5.7	0.29*	1.4*	0.29*	2.6	1.4*	0.57*	0.9	5.7*
Cache Creek near Capay (80)	A8 1120.00	9/20	14	0.57*	0.29*	1.4*	1.4*	1.4*	13	17	5.7*	0.29*	1.4*	0.29*	4.0	1.4*	0.57*	2.1	5.7*
Calaveras River near Stockton (16b)	B0 2520.00	9/1	14	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	13	5.7*	0.29*	1.4*	0.29*	2.4	1.4*	0.57*	3.1	5.7*
Consumnes River at Michigan Bar (94)	B1 1150.00	9/16	7.7	0.57*	0.29*	1.4*	1.4*	1.4*	6.6	23	5.7*	0.29*	1.4*	0.29*	2.1	1.4*	0.57*	0.6	5.7*
Delta-Cross Channel near Walnut Grove (98)	B9 1700.00	9/12	1.4*	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	40	5.7*	0.29*	1.4*	0.29*	2.7	1.4*	0.57*	5.7	5.7*
Feather River at Nicolaus	A0 5103.00	9/15	9.1	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	8.8	5.7*	0.29*	1.4*	0.29*	1.8	1.4*	0.57*	13	5.7*
Feather River near Oroville	A5 1140.02	9/15	9.4	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	9.1	5.7*	0.29*	1.4*	0.29*	1.2	1.4*	0.57*	0.6	5.7*
Mokelumne River at Woodbridge(23)	B9 4300.00	9/16	54	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	5.1	5.7*	0.29*	1.4*	0.29*	1.3	1.4*	0.57*	0.3	5.7*
Old River at Mandeville Island (112)	B9 5110.00	9/1	9.1	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	14	5.7*	0.29*	1.4*	1.3	2.4	1.4*	0.57*	4.0	5.7*
Pit River near Canby (17a)	A1 1680.00	5/4	771	13	0.29*	27	1.4*	1.4*	21	810***	5.7*	0.29*	34	0.29*	2.5	1.4*	22	12	5.7*
		9/8	714	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	908	5.7*	0.29*	51	41	5.4	1.4*	0.57*	11	5.7*
Sacramento River at Bend (12c)	A0 2785.00	5/3	37	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	36***	5.7*	0.29*	1.4*	0.29*	1.8	1.4*	0.57*	1.4	31
		9/13	27	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	39	5.7*	0.29*	1.4*	0.29*	2.3	1.4*	0.57*	1.5	5.7*
Sacramento River at Colusa (13b)	A0 2420.00	5/5	27	0.57*	0.29*	1.4*	1.4*	1.4*	18	34***	5.7*	0.29*	1.4*	0.29*	1.5	1.4*	0.57*	1.9	25
		9/14	11	0.57*	0.29*	1.4*	1.4*	1.4*	36	23	5.7*	0.29*	1.4*	0.29*	2.7	1.4*	0.57*	0.8	5.7*
Sacramento River at Colusa Basin Drain (14b)	A0 2430.02	5/5	43	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	34	5.7*	0.29*	1.4*	0.29*	2.3	1.4*	1.9	3.7	34
		9/14	20	0.57*	0.29*	1.4*	1.4*	1.4*	11	63	5.7*	0.29*	18	0.29*	2.1	1.4*	0.57*	2.4	5.7*
Sacramento River at Freeport (15b)	B9 1849.90	4/6	93	1.3*	0.67*	3.3*	3.3*	3.3*	3.3*	73	13*	0.67*	3.3*	0.67*	2.1	3.3*	1.3*	1.7	13*
		6/20	9.3	1.3*	0.67*	3.3*	3.3*	3.3*	10	11	13*	0.67*	3.3*	0.67*	3.3	3.3*	1.3*	1.8	13*
Sacramento River at Hamilton City (13)	A0 2630.00	5/4	37	0.57*	0.29*	1.4*	1.4*	1.4*	5.7	29***	5.7*	0.29*	1.4*	0.29*	1.2	1.4*	1.2	1.7	15
		9/14	17	0.57*	0.29*	1.4*	1.4*	1.4*	13	45	5.7*	0.29*	13	0.29*	2.8	1.4*	0.57	11	5.7*
Sacramento River at Keswick (12)	A2 1010.00	3/8	37	1.3*	0.67*	3.3*	3.3*	3.3*	3.3*	52	13*	0.67*	3.3*	0.67*	2.5	3.3*	1.3*	1.3	73
		5/3	49	0.57*	0.29*	1.4*	1.4*	1.4*	7.7	31***	5.7*	0.29*	1.4*	0.29*	2.0	1.4*	0.57*	1.1	29
Sacramento River at Rio Vista (16)	B9 1210.00	9/12	10	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	29	1.4*	0.29*	1.4*	0.29*	4.8	1.4*	0.57*	5.1	5.7*
Truckee River at Farad (53)	G7 1195.00	9/7	8.0	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	99	5.7*	0.29*	1.4*	0.29*	2.1	1.4*	0.57*	0.29*	5.7*
Yuba River at Marysville (21)	A0 6120.00	9/15	9.7	0.57*	0.29*	1.4*	1.4*	1.4*	1.4*	23	5.7*	0.29*	1.4*	0.29*	2.4	1.4*	0.57*	11	5.7*

* Results are less than the amount indicated
** Results are equal to, but slightly less than the amount indicated
*** Results are more than the amount indicated

TABLE D-4
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER
Northeastern California

Station	Station Number	Date 1965-66	Coliform MPN/ml		Turbidity PPM	Turbidity UNITS	MBAS in mg/l	AS in mg/l	PO_4 in mg/l	Other Constituents
American River, Middle Fork near Auburn (22b)	A7 3100.00	11/2				1				
		1/5				5				
		3/24				5				
		5/12				1	0.0	0.00	0.00	
		7/5				1				
		7/19				1	0.0	0.01	0.00	
American River at Nimbus (22a)	A7 1110.00	10/4	6.2	6.2		1				
		11/2	23	23		1				
		11/30	62	62		4				
		1/5	50	62		4				
		2/7	620	620		3				
		3/8	230	230		1				
		4/6	23	23		1				
		5/3	29	620		1	0.0	0.00	0.00	
		6/10	62	23		1				
		7/15	62	13		2				
		8/8	62	6.2		2				
		9/16	13	62		4	0.0	0.00	0.01	
American River at Sacramento (22)	A0 7140.00	10/8	2.3	23		1				
		11/2	23	2.3		1				
		11/30	13	130		4				
		1/5	6.2	62		4				
		2/7	14	230		3				
		3/8	62	62		3				
		4/8	62	23		1				
		5/3	23	23		1	0.0	0.00	0.58	
		6/10	21	2.3		1				
		7/15	23	2.3		2				
		8/8	62	23		3				
		9/16	2.3	13		4	0.0	0.00	0.50	
American River, South Fork near Lotus (22c)	A7 4150.00	11/2				25				
		1/5				5				
		3/24				2				
		5/12				20	0.0	0.00	0.00	
		7/5				2				
		9/19				1	0.0	0.00	0.00	
Antelope Creek near Mouth (88c)	A0 4520.00	10/6			5					
		11/3			4					
		12/13			4					
		1/17			2					
		2/10			1					
		3/2			1					
		4/12			4					
		5/2			4		0.0	0.00	0.46	
		6/2			4					
Antelope Creek near Red Bluff (88e)	A4 5110.50	10/6			1					
		11/3			0					
		12/13			1					
		1/17			1					
		2/9			1					
		3/2			1					
		4/12			1					
		5/2			1		0.0	0.00	0.04	
		6/2			1					
		7/6			1					
		9/1			1		0.0	0.00	0.02	
Battle Creek near Cottonwood (88b)	A4 7110.00	10/7			1					
		11/4			1					
		12/13			3					
		1/5			10					
		2/4			5					
		3/8			2					
		4/12			5					
		5/2			1		0.0	0.00	0.12	
		6/2			1					
		7/6			1					
		9/1			2		0.0	0.00	0.18	
Bear River near Wheatland (78)	A0 6550.00	10/8	0.23	0.62		1				
		11/5				1				
		12/3	23	62		3				
		1/7				30				
		2/11	6.2	6.2		15				
		3/10	2.3	6.2		5				
		4/7	2.3	1.3		2				
		5/5	130	50		1				
		6/9	6.2	23		2				
		7/14	23	62		2				
		8/11	2.3	0.62		1				
		9/15	62	6.2		3				
Big Chico Creek @ Chico (85a)	A0 4250.00	10/6			1					
		11/3			0					
		12/1			1					
		1/5			10					
		2/8			1					
		3/8			1					
		4/6			1					
		5/4			1		0.0	0.00	0.02	
		6/9			1					

TABLE D-4
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER
Northeastern California

Station	Station Number	Date 65-66	Coliform MPN/ml		Turbidity PPM	Turbidity UNITS	MBAS in mg/l	AS in mg/l	PO_4 in mg/l	Other Constituents
Big Chico Creek near Chico (85)	A4 2110.00	10/6			1					
		11/4			0					
		12/1			1					
		1/6			4					
		2/8			1					
		3/8			1					
		4/6			1					
		5/4			1	0.0	0.00	0.03		
		6/9	2.1	6.2	1					
		7/13	23	62	1					
		8/10	0.62	2.3	1					
		9/14	21	62	1	0.0	0.00	0.04		
Butte Creek near Chico (84)	A4 1110.00	10/6			1					
		11/3			0					
		12/1			2					
		1/5			40					
		2/8			1					
		3/8			1					
		4/8			1					
		5/4			1	0.0	0.00	0.00		
		6/9	2 3	2.3	1					
		7/13	6.2	23	1					
		8/10	0.62	13	1					
		9/14	2.3	5.0	1	0.0	0.00	0.08		
Cache Creek near Capay (80)	A8 1120.00	10/5			3					
		11/19			175					
		12/8			2					
		1/13			90					
		2/14			10					
		3/24			4					
		4/7			1					
		5/13			4	0.0	0.00	0.06		
		6/3			5					
		7/15			7					
		8/9			7					
		9/20			3	0.0	0.00	0.10		
Cache Creek near Lower Lake (42)	A8 1350.00	10/5	2.3	6.2	5					
		11/3	62	62	10					
		12/9	13	230	5					
		1/7	230	620	70					
		2/8	6.2	62	25					
		3/4	2.3	23	10					
		4/7			5					
		5/4			5	0.0	0.00	0.33		
		6/7			10					
		7/13	2.3	6.2	5					
		9/14	62	62	20	0.0	0.00	0.36		
Cache Creek, North Fork near Lower Lake (79)	A8 2050.00	10/5			1					
		11/3			0					
		12/9	6.2	23	1					
		1/7			250					
		2/8			45					
		3/4			2					
		4/7			1					
		5/4			0	0.0	0.00	0.05		
		6/7			1					
		7/13			1					
		9/14			3	0.0	0.00	0.17		
Calaveras River below New Hogan Dam (16c)	B2 5300.00	10/4				5				
		11/1	9.5	2.3		4				
		12/2	23	23		3				
		1/3	23	62		4				
		2/7	5.0	0.62		4				
		3/7	21	2.3		2				
		4/4	13	23		4				
		5/3	0.23	23		1	0.0	0.00	0.02	
		6/6	2.3	2.3		1				
		8/8	2.3	0.23		1				
		9/12	23	23						
Calaveras River above New Hogan Dam (16d)	B2 5898.50	10/4				1				
		11/1	23	2.1		0				
		12/2	6.2	23		1				
		1/3	23	230		2				
		2/7	62	130		10				
		3/7	6.2	0.23		1				
		4/4	62	13		1				
		5/3	6.2	6.2		1	0.0	0.00	0.01	
		6/6	6.2	2.3		3				
		7/11	2.3	2.3		1				
Calaveras River at Jenny Lind (16a)	B0 2590.00	10/13				3				
		11/9				4				
		12/6				1				
		1/6				4				
		2/1				5				
		3/1				1				
		4/11				1				
		5/4				1	0.0	0.00	0.01	
		6/3				Sample	Broken			
		7/5				1				
		8/9				2				
		9/1				1	0.0	0.00	0.01	

TABLE D-4
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER
Northeastern California

Station	Station Number	Date 65-66	Coliform MPN/ml		Turbidity PPM	Turbidity UNITS	MBAS in mg/l	AS in mg/l	PO_4 in mg/l	Other Constituents
Calaveras River at Stockton (16b)	80 2520.00	10/14	Dry							
		11/3	Dry							
		12/6				4				
		1/6				60				
		2/1				40				
		3/1				5				
		4/13				40				
		5/12				3	0.0	0.00	0.11	
		6/1				55				
		7/12	230	62		10				
		8/12	Dry							
		9/1				5	0.0	0.00	0.05	
Clear Creek near Igo (12d)	A3 6130.00	10/7			3					
		11/4			3					
		12/13			4					
		1/5			5					
		2/4			10					
		3/2			2					
		4/13			1					
		5/3			1		0.0	0.00	0.00	
		6/3			1					
		7/7			1					
		9/2			1		0.0	0.00	0.00	
Clear Lake at Lakeport (41)	A8 1720.00	10/5	1.3	23	30					
		11/3	.62	6.2	40					
		12/9	5	6.2	40					
		1/7	620	2400	70					
		2/8	6.2	23	45					
		3/4	23	62	50					
		4/8	2.3	2.3	25					
		5/6	23	23	10		0.0	0.00	0.15	
		6/10	2.3	6.2	5					
		7/21	.5	1.3	5					
		9/14	6.2	23	20		0.0	0.01	0.88	
Colusa Basin Drain near Colusa (87)	A0 2976.00	10/6			30					
		11/3			35					
		12/1			30					
		1/5			525					
		2/8			210					
		3/9			25					
		4/7			65					
		5/5			45		0.0	0.00	0.30	
		6/8			40					
		7/13			25					
		8/11			25					
		9/14			35		0.0	0.00	0.21	
Cottonwood Creek near Cottonwood (12b)	A0 3520.00	10/7			1					
		11/4			1					
		12/13			4					
		1/17			25					
		2/10			15					
		3/2			5					
		4/13			25					
		5/2			2		0.0	0.00	0.00	
		6/2			1					
		7/6			1					
		8/12			3					
		9/1			1		0.0	0.00	0.07	
Cottonwood Creek below North Fork Cottonwood Creek (11a)	A0 3540.00	10/7			1					
		11/4			0					
		12/13			5					
		1/5			180					
		2/4			105					
		3/2			10					
		4/13			5					
		5/3			1		0.0	0.00	0.03	
		6/3			1					
		7/7			1					
		9/2			1		0.0	0.00	0.03	
Cottonwood Creek, South Fork above Cottonwood Creek (11b)	A0 3595.00	10/7			1					
		11/4			1					
		12/13			1					
		1/17			25					
		2/10			4					
		3/2			2					
		4/13			40					
		5/3			1		0.0	0.00	0.00	
		6/2			1					
		7/6			1					
Consumnes River at McConnel (94a)	80 1125.00	11/1	Dry							
		1/6	230	620		5				
		3/8	2.1	2.3		3				
		5/4	620	6.2		1	0.0	0.00	0.01	
		7/12	DRY							
		9/1	Dry							
Consumnes River at Michigan Bar (94)	81 1150.00	11/2				1				
		1/5				4				
		3/1				1				
		5/12				1	0.0	0.00	0.00	
		7/5				1				
		9/16				1	0.0	0.00	0.01	

TABLE D-4
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER
Northeastern California

Station	Station Number	Date 1965-66	Caliform MPN/ml		Turbidity PPM	Turbidity UNITS	MBAS in mg/	AS in mg/	PO_4 in mg/l	Other Constituents
Cow Creek near Millville (88a)	A4 8110.00	10/7			2					
		11/4			1					
		12/13			1					
		1/17			3					
		2/4			45					
		3/7			4					
		4/13			10					
		5/2			1		0.0	0.00	0.04	
		6/2			1					
		7/6			5					
		9/1			2		0.0	0.00	0.30	
Delta Cross Channel near Walnut Grove (98)	B9 1700.00	10/6	230	6.2		2				
		11/1	62	6.2		3				
		11/29	130	500		5				
		1/3	62	230		10				
		2/9	620	620		90				
		3/8	62	230		4				
		4/6	1300	620		40				
		5/3	620	230		5	0.0	0.00	0.26	
		6/8	23	62		4				
		7/12	6.2	62		10				
		8/12	230	620		7				
		9/13	1300	2400		15	0.0	0.00	0.47	
Elder Creek @ Gerber (95a)	A0 3320.00	12/13			4					
		1/17			30					
		2/10			15					
		3/2			3					
		4/12			20					
		5/2			1		0.0	0.00	0.05	
		6/2			1					
Elder Creek near Paskenta (13e)	A3 3110.00	10/7			1					
		11/2			0					
		12/2			45					
		1/6			210					
		2/9			15					
		3/8			4					
		4/6			25					
		5/4			1		0 0	0.00	0.07	
		6/8			1					
		9/13			1		0.0	0.00	0.01	
Feather River, Middle Fork near Merrimac (19b)	A5 5100.00	10/1				1				
		11/8				0				
		12/7				2				
		1/14				1				
		3/3				1				
		4/14				2				
		5/11				5	0.0	0.00	0.01	
		6/2				1				
		7/7				1				
		8/4				1				
		9/2				6	0.0	0.00	0.01	
Feather River at Nicolaus (20)	A0 5103.00	10/8	2.3	1.3		5				
		11/5				4				
		12/3	23	50		5				
		1/7				40				
		2/11	620	620		5				
		3/10	62	23		4				
		4/7	23	6.2		5				
		5/5	230	23		4	0.0	0.00	0.03	
		6/9	6.2	2.3		4				
		7/14	13	6.2		5				
		8/11	2.3	0.62		4				
		9/15	62	23		5	0.0	0.00	0.03	
Feather River, North Fork at Big Bar (19m)	A5 3140.00	10/15				1				
		11/17				4				
		12/3				2				
		1/12				1				
		2/4				2				
		3/23				2				
		4/7				4				
		5/11				1	0.0	0.00	0.00	
		6/9				1				
		7/20				2				
		8/11				1				
		9/15				1	0.0	0.00	0.00	
Feather River near Oroville (19)	A5 1140.00	10/8	2.3	< 0.045		1				
		11/5	2.3	23		2				
		12/3	6.2	6.2		5				
		1/7				5				
		2/11	2.3	6.2		4				
		3/10	1.3	6.2		5				
		4/7	23	6.2		4				
		5/5	2.3	23		1	0.0	0.00	0.01	
		6/9	6.2	1.3		4				
		7/14	1.3	2.3		4				
		8/11	0.62	2.3		2				
		9/15	23	23		2	0.0	0.00	0.00	

TABLE D-4
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER
Northeastern California

Station	Station Number	Date 65-66	Coliform MPN/ml		Turbidity PPM	Turbidity UNITS	MBAS in mg/l	AS in mg/l	PO_4 in mg/l	Other Constituents
Feather River below Shanghai Bend (20a)	A0 5120.00	10/8				4				
		11/5				4				
		12/3				5				
		1/7				10				
		2/11				10				
		3/10				4				
		4/7				5				
		5/5				10	0.0	0.00	0.02	
		6/9				4				
		7/14				4				
		8/11				4				
		9/15				5	0.0	0.00	0.06	
Feather River, South Fork below Ponderosa Dam (19c)	A5 6080.00	10/8				4				
		11/5				4				
		12/3				5				
		1/7				10				
		2/11				10				
		3/10				4				
		4/7				5				
		5/5				10	0.0	0.00	0.02	
		6/9				4				
		7/14				4				
		8/11				4				
		9/15				5	0.0	0.00	0.06	
Feather River, West Branch near Yankee Hill (19d)	A5 2100.00	10/15				1				
		11/16				2				
		12/3				2				
		1/12				1				
		2/4				3				
		3/10				4				
		4/7				2				
		5/11				1	0.0	0.00	0.00	
		6/9				1				
		7/20				1				
		8/11				1				
		9/15				4	0.0	0.00	0.07	
Grant Line Canal at Tracy Road Bridge (103a)	B9 5300.00	10/7	0.06	0.23		5				
		11/3	6.2	6.2		5				
		12/2	620	230		20				
		1/4	620	230		55				
		2/8	62	62		15				
		3/7	6.2	2.3		10				
		4/5	62	230		35				
		5/2	6.2	5.0		20	0.0	0.00	0.60	
		6/7	2400	230		20				
		7/11	12	9.2		20				
		8/9	62	21		20				
		9/14	230	62		20	0.0	0.00	0.62	
Indian Creek near Crescent Mills ** (17d)	A5 4320.00	11/17	13	14		15				
		1/12	8	9		5				
		3/23	7	7		25				
		5/11				10	0.0	0.01	0.05	
		7/20	65	75		4				
		9/13				1				
Indian Slough near Brentwood (107)	B9 5279.80	10/14				25				
		11/19				40				
		12/6				15				
		1/5				5				
		2/8				25				
		3/9				5				
		4/13				35				
		5/13				50	0.0	0.00	0.32	
		6/3				40				
		7/8				45				
		8/12				45				
		9/13				25	0.0	0.00	0.28	
Italian Slough near Mouth (106)	B9 5279.50	10/7				15				
		11/4				17				
		12/1				15				
		1/6				30				
		2/2				20				
		3/2				27				
		4/6				25				
		5/4				45	0.0	0.00	0.30	
		6/1				70				
		7/6				60				
		8/3				35				
		9/6				30				
Lindsey Slough near Rio Vista (110)	B9 1260.00	10/6	<0.045	<0.045		50				
		11/4	230	23		30				
		12/10	620	620		15				
		1/14	230	230		135				
		2/9	62	130		105				
		3/3	23	62		80				
		4/14	6.2			60				
		5/20	6.2	13		65	0.0	0.00	0.29	
		6/17	5	23		75				
		7/15	6.2	23		90				
		9/6	23	62		60	0.0	0.00	0.40	
Little Potato Slough at Terminous (99)	B9 4120.10	11/9				10				
		1/3				40				
		3/1				15				
		5/12				10	0.0	0.00	0.17	
		7/8				30				
		9/12				15	0.0	0.00	0.96	

** Coliform by Millipore Filter Method

TABLE D-4
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER
Northeastern California

Station	Station Number	Date 65-66	Coliform MPN/ml		Turbidity PPM	Turbidity UNITS	MBAS in mg/l	AS in mg/l	PO_4 in mg/l	Other Constituents
McCloud River above Shasta Lake (18)	A2 2150.00	10/4			1					
		11/1			1					
		11/29			5					
		1/3			1					
		2/7			1					
		3/7			1					
		4/8			1					
		5/3			2		0.0	0.00	0.04	
		6/7			1					
		7/7			1					
		8/12			1					
		9/13			1		0.0	0.00	0.09	
Mill Creek near Mouth (88)	A4 4110.00	10/6			1					
		11/3			1					
		12/13			3					
		1/17			3					
		2/10			1					
		3/2			1					
		4/12			5					
		5/2			5		0.0	0.00	0.06	
		6/2			1					
		7/6			1					
		8/1			1					
		9/1			2		0.0	0.02	0.11	
Mokelumne River below Camanche Dam (23a)	B2 1170.00	11/9				1				
		1/6				2				
		3/1				2				
		5/4				1	0.0	0.00	0.00	
		7/5				1				
		9/1				1	0.0	0.00	0.03	
Mokelumne River at Woodbridge (23)	B9 4300.00	11/1	6.2	6.2		2				
		1/6	5.0	1.3		4				
		3/8	2.3	0.62		4				
		5/3	6.2	6.2		1	0.0	0.00	0.02	
		7/12	13	23		3				
		9/16	5.0	230		4	0.0	0.00	0.03	
Old River at Clifton Court Ferry (104)	B9 5340.00	10/7	0.23	0.06		5				
		11/3	23	6.2		10				
		12/2	230	620		30				
		1/4	62	620		40				
		2/8	50	50		25				
		3/7	23	6.2		15				
		4/5	6.2	23		30				
		5/2	6.2	13		35	0.0	0.00	0.32	
		6/7	62	13		30				
		7/11	23	6.2		55				
		8/9	6.2	23		30				
		9/14	23	23		25	0.0	0.00	0.30	
Old River at Mandeville Island (112)	B9 5110.20	10/13				10				
		11/9				10				
		12/6				15				
		1/13				25				
		2/1				15				
		3/1				40				
		4/11				25				
		5/12				15	0.0	0.00	0.22	
		6/1				25				
		7/8				35				
		8/2				35				
		9/1				20	0.0	0.00	0.29	
Old River at Orwood Bridge (108)	B9 5320.20	10/14				25				
		11/9				15				
		12/6				35				
		1/6				40				
		2/9				40				
		3/9				50				
		4/13				30				
		5/13				35	0.0	0.00	0.22	
		6/3				25				
		7/8				45				
		8/12				40				
		9/13				30	0.0	0.00	0.27	
Old River near Tracy (103)	B9 5380.80	10/7	0.62	0.06		10				
		11/3	210	62		10				
		12/2	620	230		10				
		1/4	620	620		40				
		2/8	620	230		20				
		3/7	7000	≥ 24,000.		10				
		4/5	130	23		20				
		5/2	13	62		20	0.0	0.00	0.68	
		6/7	230	130		20				
		7/11	62	230		35				
		8/9	37	62		15				
		9/14	23	21		15	0.0	0.00	0.73	
Paynes Creek near Red Bluff (88g)	A0 4620.00	10/6			2					
		11/3			1					
		12/15			3					
		1/17			2					
		2/9			2					
		3/2			2					
		4/12			1					
		5/2			1		0.0	0.00	0.25	
		6/2			5					
		7/6			1					
		9/7			1		0.0	0.00	0.42	

TABLE D-4
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER
Northeastern California

Station	Station Number	Date	Coliform MPN/ml		Turbidity PPM	Turbidity UNITS	MBAS in mg/l	AS in mg/l	PO_4 in mg/l	Other Constituents
Pit River near Canby (17a)	A1 1680.00	10/5			30					
		11/2			10					
		12/14			10					
		1/18			30					
		2/8			40					
		3/23			50					
		4/19			35					
		5/4			35		0.0	0.00	0.10	
		6/9			20					
		7/5	6.2	6.2	30					
		8/15	23	7,000	10					
		9/8	2.3	13	20		0.0	0.01	0.57	
Pit River near Montgomery Creek (17)	A1 1020.00	10/7			1					
		11/4			1					
		12/14			3					
		1/18			4					
		2/4			2					
		4/19			5					
		5/4			1		0.0	0.00	0.09	
		6/9			1					
		7/5			1					
		8/4			1					
		9/8			1		0.0	0.00	0.16	
Pit River, South Fork near Likely (18a)	A1 4400.00	10/6			2					
		11/3			1					
		12/14			2					
		1/19			3					
		2/9			2					
		3/24			35					
		4/19			5					
		5/4			10		0.0	0.00	0.30	
		6/9			25					
		7/5			35					
		8/15			35					
		9/7			20		0.0	0.00	0.32	
Putah Creek near Winters (81)	A9 1250.00	10/6	<0.045	<0.045		1				
		11/4	2.3	62		3				
		12/9	21	62		2				
		1/14	23	23		15				
		2/9	1.3	2.3		5				
		3/3	2.3	6.2		1				
		4/14	6.2	23		1				
		5/20	2.3	6.2		1	0.0	0.00	0.02	
		6/17	23	62		1				
		7/15	0.62	2.30		1				
		9/6	6.20	2.30		1	0.0	0.00	0.03	
Red Bank Creek near Red Bluff (88d)	A0 3460.00	12/2			1					
		1/6			150					
		2/9			15					
		3/8			1					
		4/6			1					
		5/4			1		0.0	0.00	0.10	
Rock Slough near Knightsen (109)	B9 5220.00	10/6	<0.045	<0.045		10				
		11/4	62	6.2		15				
		12/1	21	62		15				
		1/3	23	62		5				
		2/8	6.2	6.2		30				
		3/9	6.2	6.2		40				
		4/5	230	620		25				
		5/2	23	2.3		35	0.0	0.00	0.22	
		6/8	23	2.3		30				
		7/13	2.3	6.2		35				
		8/9	62	13		30				
		9/14	23	23		25	0.0	0.00	0.25	
Sacramento River at Bend (12c)	A0 2785.00	10/4	230	230	2					
		11/1	620	62	1				0.13	
		11/29	130	62	5					
		1/3	6.2	62	4				0.08	
		2/7	62	23	25				0.11	
		3/8	62	130	3				0.11	
		4/5	620	24,000	5				0.08	
		5/3	62	230	1		0.0	0.00	0.05	
		6/7	130	7,000	1					
		7/11	620	620	1				0.09	
		8/9	23	620	1					
		9/13	0.6	2.3	2		0.0	0.00	0.07	
Sacramento River at Butte City (87a)	A0 2500.00	10/6			2					
		11/3			2					
		12/1			5					
		1/5			525					
		2/8			65					
		3/9			5					
		4/7			35					
		5/5			5		0.0	0.00	0.05	
		6/8			2					
		7/13			4					
		8/11	12	23	4					
		9/14			4		0.0	0.00	0.05	
Sacramento River above Colusa (14b)	A0 2430.02	10/6			10					
		11/3			2					
		12/1			5					
		1/5			10					
		2/8			65					
		3/9			10					
		4/7			21					
		5/5			15		0.0	0.00	0.12	

TABLE D-4
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER
Northeastern California

Station	Station Number	Date 65-66	Coliform MPN/ml		Turbidity PPM	Turbidity UNITS	MBAS in mg/l	AS in mg/l	PO_4 in mg/l	Other Constituents
Sacramento River above Colusa (14b) Continued.	A0 2430.02	6/8			10					
		7/13			5					
		8/11			5					
		9/14		.	10		0.0	0.00	0.10	
Sacramento River at Colusa (13b)	A0 2420.00	10/6			10					
		11/3			3				0.11	
		12/1	23	230	5					
		1/5	1300	130	75					
		2/8	230	620	90					
		3/9	23	23	10					
		4/7	23	62	35					
		5/5	6.2	6.2	4		0.0	0.00	0.06	
		6/9	2.3	23	4					
		7/13	6.2	62	5					
		8/11	6.2	23	4					
		9/14	2.3	6.2	3		0.0	0.00	0.06	
Sacramento River at Delta (11)	A2 1300.00	10/4			1					
		11/1			0					
		11/29			2					
		1/3			4					
		2/7			2					
		3/8			10					
		4/5			5					
		5/3	0.50	2.30	2		0.0	0.00	0.04	
		6/7	23	130	1					
		7/11	0.23	0.62	1					
		8/8	0.62	2.3	1					
		9/13	0	0.6	1		0.0	0.00	0.09	
			L.B.	R.B.						
Sacramento River at Freeport (15b)	B9 1849.90	10/6	<0.045	<0.045		5				
			0.06	<0.045						
		11/1	230	5.0		2				
			5.0	2.3						
		11/29	130	620		5				
			230	620						
		1/3	2400	2400		10				
			500	500						
		2/9	230	620		90				
			130	230						
		3/8	620	620		4				
			230	230						
		4/6	230	≥24,000		25			*0.32	
			210	62						
		5/3	7000	620		4	0.0	0.00	*0.45	
			620	2400						
		6/8	230	230		10				
			23	23						
		7/12	230	620		10				
			23	23						
		8/12	230	230		4				
			62	230						
		9/12	620	62		15	0.0	0.01	0.38	
			13	6.2						
Sacramento River at Keswick (12)	A2 1010.00	10/4	23	24,000	2					
		11/1	62	23	1					
		11/29	1.3	6.2	5					
		1/3	0.06	0.45	3					
		2/7	0.6	23	4					
		3/8	0.2	1.4	2					
		4/5	0.62	0.62	1					
		5/3	0.06	0.01	1		0.0	0.00	0.12	
		6/7	23	24,000	1					
		7/11	130	62	1					
		8/11	23		1					
		9/13	0	620	1		0.0	0.00	0.05	
Sacramento River near Hamilton City (13)	A0 2630.00	10/6			5					
		11/3			1					
		12/1	24000	24000	5					
		1/5	230	7000	525					
		2/8	620	620	25					
		3/8	230	230	10					
		4/6	62	130	35					
		5/4	6.2	62	4		0.0	0.00	0.06	
		6/9	2.3	23	3					
		7/11	23	45	2					
		8/10	62	62	1					
		9/14	62	62	2		0.0	0.00	0.07	
			L. B.	R. B.						
Sacramento River at Rio Vista (16)	B9 1210.00	10/6		0.06		10				
				<0.045						
		11/1	62	23		10				
			23	50						
		11/29	230	230		15				
			230	62						
		1/3	230	230		50				
			620	93						
		2/9	620	2400		105				
			620	230						
		3/8	230	62		15				
			62	23						
		4/6	230	230		40				
			62	62						
		5/3	23	230		15	0.0	0.00	0.25	
			23	230						
		6/8	23	6.2		25				
			21	21						
		7/12	2.3	2.3		40				
			2.3	6.2						
		8/12	62	23		25				
			6.2	23						

* Total phosphate

TABLE D-4
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER
Northeastern California

Station	Station Number	Date 65-66	Coliform MPN/ml		Turbidity PPM	Turbidity UNITS	MBAS n mg/l	AS in mg/l	PO_4 in mg/l	Other Constituents
Sacramento River at Rio Vista (16) continued.	B9 1210.00	9/12	23	29		30	0.0	0.00	0.42	
			62	23						
Sacramento Slough near Knights Landing (14a)	A0 2925.00	10/6			30					
		11/3			10					
		4/7			40					
		5/5			40		0.0	0.01	0.39	
		6/8			30					
		7/13			25					
		8/11			25					
		9/14			90		0.0	0.01	0.8	
San Joaquin River at Antioch (28)	B9 5020.00	10/6	0.23	0.23		10				
		11/1	230	62		15				
		12/1	23	230		35				
		1/3	230	62		5				
		2/9	23	62		30				
		3/8	13	23		25				
		4/5	62	5.0		25				
		5/4	230	2400		25	0.0	0.00	0.23	
		6/8	500	23		30				
		7/12	23	6.2		55				
		9/14	620	230		50	0.0	0.00	0.43	
San Joaquin River at Garwood Bridge (101)	B9 5709.80	10/7	0.06	0.06		15				
		11/3	62	62		5				
		12/2	230	230		20				
		1/4	230	130		55				
		2/8	230	620		30				
		3/7	6.2	2.3		10				
		4/5	6.2	23		35				
		5/2	6.2	6.2		20	0.0	0.01	1.5	
		6/7	23	5.0		15				
		7/11	62	23		25				
		8/9	62	62		20				
		9/14	2400	620		20	0.1	0.00	2.9	
San Joaquin River at Mossdale Bridge (102)	B9 5820.00	10/7	0.62	0.23		10				
		11/3	130	23		5				
		12/2	2400	230		45				
		1/4	620	130		50				
		2/8	2400	130		40				
		3/7	13	23		10				
		4/5	230	62		35				
		5/2	62	23		25	0.0	0.00	0.5	
		6/7	6.2	23		15				
		7/11	230	23		35				
		8/9	62	20		30				
		9/14	23	620		15	0.0	0.00	0.81	
Stockton Ship Channel on Rindge Island (100)	B9 5619.80	10/7	0.23	0.62		10				
		11/3	23	500		5				
		12/2	62	62		30				
		1/4	62	230		40				
		2/8	62	230		25				
		3/7	23	2.3		10				
		4/5	6.2	13		20				
		5/2	62	13		20	0.0	0.00	0.36	
		6/7	6.2	6.2		25				
		7/11	6.2	5.0		30				
		8/9	2.3	6.2		50				
		9/16	1.3	620		35	0.0	0.00	0.37	
Stony Creek near Fruto (13f)	A3 1250.00	10/1			30	83			0.06	
		11/1			30	80			0.08	
		12/1			3				0.09	
		1/3			5				0.09	
		2/1			250	370				
		3/1			50	90			0.14	
		4/1			525	900			0.14	
		5/2			65	100	0.0	0.00	0.08	
		6/1			5	5				
		7/1			60	106			0.12	
		8/16			10					
		9/1			90		0.0	0.00	0.08	
Stony Creek below Black Butte Dam (13c)	A3 1110.00	10/7			15	50			0.09	
		11/4			15	42			0.11	
		1/6			900				0.24	
		2/9			75	80				
		3/8			40				0.13	
		4/6			25	35			0.08	
		5/4			35	45	0.0	0.00	0.07	
		6/8			40	60				
		7/13			35	70			0.09	
		8/10			10	23				
		9/13			55	70	0.0	0.01	0.11	
Susan River at Susanville (17b)	G4 1600.00	10/6			3					
		11/3			2					
		12/14			2					
		1/19			2					
		2/9			1					
		3/24			4					
		4/19			4					
		5/5			1		0.0	0.00	0.02	
		6/9			3					
		7/5			1					
		8/15			1					
		9/7			1		0.0	0.00	0.07	

TABLE D-4
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER
Northeastern California

Station	Station Number	Date 65-66	Coliform MPN/ml		Turbidity PPM	Turbidity UNITS	MBAS in mg/l	AS in mg/l	PO_4 in mg/l	Other Constituents
Thomes Creek near Mouth (95b)	A0 3200.00	12/13			10					
		1/17			90					
		2/10			35					
		3/2			90					
		4/12			325					
		5/2			90		0.0	0.00	0.07	
		6/2			5					
		7/6			1					
Thomes Creek at Paskenta (13d)	A3 2120.00	10/7			1	0			0.00	
		11/4			1	0			0.03	
		12/2			15				0.09	
		1/6			1300				0.13	
		2/9			50	70				
		3/8			200	275			0.15	
		4/6			250	380			0.13	
		5/4			50	85	0.0	0.00	0.12	
		6/8			1	0				
		7/13			1	3			0.11	
		8/10			1	1				
		9/13			1	1	0.0	0.00	0.01	
Yuba River at Marysville (21)	A0 6120.00	11/5	1.3	0.23		0				
		1/7				4				
		3/10	2.3	2.3		3				
		5/5	1.3	6.2		1	0.0	0.00	0.01	
		7/14	2.3	0.62		4				
		9/15	6.2	23		2	0.0	0.01	0.03	
Yuba River near Smartville (21a)	A6 1100.00	11/5				1				
		1/7				4				
		3/3				1				
		5/5				1	0.0	0.00	0.00	
		7/14				1				
		9/2				1	0.0	0.00	0.01	
			LAHONTAN REGION (No. 6)							
Carson River, East Fork near Markleeville (115)	G8 3420.20	11/16	4.6	2.4		1				
		1/11	0.07	0.15		1				
		3/22	0.091	0.036		4				
		5/10	0.43	0.23		5	0.0	0.00	0.05	
		7/19	4.6	0.93		2				
		9/8	0.64	2.4		8	0.0	0.00	0.00	
Carson River, West Fork at Woodfords (115a)	G8 2300.00	11/16	2.4	4.6		1				
		1/11	0.23	0.23		1				
		3/22	0.14	0.23		1				
		5/10	0.93	4.6		3	0.0	0.00	0.02	
		7/19	2.4	4.6		2				
		9/8	0.64	0.32		2	0.0	0.00	0.02	
Lake Tahoe at Tahoe City (38)	G7 1710.00	11/15	0.43	0.93		0				
		1/10	0.07	0.23		0				
		3/21	0.03	0.036		1				
		5/9	0.43	4.6		0	0.0	0.00	0.00	
		7/18	0.23	0.23		1				
		9/7	0.20	0.20		2	0.0	0.00	0.02	
Truckee River near Farad (53)	G7 1195.00	10/4	0.23	0.62		4			*0.04	
		11/15	11	4.6		7			*0.06	
		11/30	62	23		20			*0.24	
		1/10	0.35	4.6		7			*0.06	
		2/7	6.2	1.3		2			*0.02	
		3/21	2.4	0.93		15			*0.08	
		4/4	2.3	2.3		10			*0.04	
		5/9	0.23	0.23		7	0.0		*0.07	
		6/6	2.3	0.50		4			*0.04	
		7/18	2.4	0.23		2			*0.05	
		8/8	1.3	2.3		20			*0.06	
		9/7	0.64	2.4		6	0.0		*0.04	
Truckee River near Truckee (52)	G7 1600.50	11/15				1				
		1/10	0.20	0.28		1				
		3/21				1				
		5/9				1	0.0	0.00	0.01	
		7/18				1				
		9/7				1	0.0	0.00	0.03	
Walker River, East near Bridgeport (116a)	G9 3200.00	11/16	2.4	0.43		15				
		1/11	0.04	0.04		4				
		3/22	0.036	0.43		5				
		5/10	0.091	0.073		4	0.0	0.01	0.23	
		7/19	> 11	0.29		4				
		9/8	0.32	0.32		25	0.0	0.90	0.04	
Walker River, West near Coleville (116)	G9 2400.00	11/16	0.93	0.93		1				
		1/11	0.09	0.09		0				
		3/22	0.15	0.091		1				
		5/10	0.23	0.23		2	0.0	0.00	0.02	
		7/19	2.4	0.29		1				
		9/8	0.32	2.4		6	0.0	0.00	0.01	

* Total phosphate

TABLE D-5

DESCRIPTION OF SALINITY
OBSERVATION STATIONS

STATIONS		MAP REFERENCE NUMBER	TIME INTERVAL (a)		LOCATION
			Hours	Min.	
					SUISUN BAY
EO 3100.90	Crockett		3	30	West end of Carquinez Strait, south shore, 0.2 mile east of Carquinez Bridge on wharf of C and H Sugar Refinery Corporation
EO 3300.10	Martinez		3	50	Sampled from Shell Oil Company dock, about 0.6 mile downstream from Southern Pacific Company railroad bridge.
EO 3200.90	Port Chicago		4	20	South shore of Suisun Bay at U.S. Naval ammunition loading wharf below Port Chicago.
EO 3200.00	Middle Point				South shore of Suisun Bay, about 0.5 mile upstream from Middle Point at Allied Chemical Corporation yard.
B9 1070.10	Pittsburg	1	5	00	East end of Suisun Bay, south shore, at Pittsburg Yacht Harbor.
					SACRAMENTO RIVER DELTA
B9 1110.00	Collinsville	2	5	25	Sacramento River, north bank, at junction with San Joaquin River.
B9 1140.50	Emmaton	3	5	45	Sacramento River, south bank, 5.9 miles downstream from Rio Vista.
B9 1160.00	Threemile Slough Bridge	4	5	55	At junction of slough and Sacramento River.
B9 1210.10	Rio Vista Bridge	5	6	05	Sacramento River at Highway 12 Bridge.
B9 1600.10	Isleton Bridge	6	6	30	Sacramento River, one mile upstream from Isleton.
					SAN JOAQUIN RIVER DELTA
B9 5020.00	Antioch	7	5	55	San Joaquin River at City Water Works pumping plant.
B9 5020.10	Antioch Bridge	8	6	10	San Joaquin River at Antioch Bridge.
B9 5040-50	Jersey Island	9	6	20	San Joaquin River, left bank, approximately 1.5 miles below mouth of False River.
B9 5060.00	Threemile Slough	10	6	30	Threemile Slough, west bank, at junction of slough with the San Joaquin River.
B9 5060.80	False River	11	6	40	False River, north bank, approximately 0.75 mile upstream from junction with San Joaquin River at Bradford Island.
B9 5100.00	San Andreas Landing	12	6	55	San Joaquin River, right bank, one mile below the mouth of the Mokelumne River.
B9 5220.50	Dutch Slough	13	7	05	At Bethel Island Bridge.
B9 5820.00	Mossdale Bridge	14	10	50	San Joaquin River at U.S. Highway 50 crossing about 3 miles southwest of Lathrop.

(a) Time interval between high tide at Golden Gate and time for taking samples at station.

TABLE D-6

MAXIMUM OBSERVED SALINITY AT BAY AND DELTA STATIONS
FOR SELECTED YEARS
In parts of chloride per million parts of water*

Station (a)		1931	1939	1944	1952	1958	1962	1963	1964	1965	1966
Sacramento-San Joaquin System Unimpaired runoff in percent of average (c)		35	50	63	171	169	93	132	63	152	76
						Suisun Bay					
Crockett	B0 3100.90				13,200	11,900	13,900	13,100	14,600	13,000	15,300
Martinez	B0 3300.10	16,900	16,400		8,900	7,150	12,700	11,500	12,900	11,200	12,000
Port Chicago	B0 3200.90				6,900	5,830	9,370	9,200	11,200	9,710	10,700
Middle Point	B0 3200.00								10,100	9,840	10,100
Pittsburg	B9 1070.10				1,200	1,200	3,980	1,350	3,280	1,080	2,880
						Sacramento River Delta					
Collinsville	B9 1110.00	12,600	10,400	4,700	783	550	2,430	1,980	3,730	2,080	3,900
Emmaton	B9 1140.50					29	841	382	1,470	276	1,370
Threemile Slough Bridge	B9 1160.00	8,600	5,900	1,610	175	18	232	134	459	103	651
Rio Vista Bridge	B9 1210.10	7,400	4,050	550	175	17	52	38	690	26	195
Isleton Bridge	B9 1600.10	6,350	2,500	50	125	14	18	14	20	13	22
						San Joaquin River Delta					
Antioch	B9 5020.00	12,400	9,200	4,000	354	184	1,770	1,040	2,500	920	2,930
Antioch Bridge	B9 5020.10					122	479	317	892	216	1,675
Jersey Island	B9 5040.50					52	84	135	863	147	1,200
Threemile Slough	B9 5060.00					45	130	56	262	60	269
False River	B9 5060.50									174	892
San Andreas Landing	B9 5100.00						57	41	72	29	143
Dutch Slough	B9 5220.50	5,100	2,250	690	88	110	192	98	434	68	420
Mossdale Bridge	B9 5820.00	120	160	130	122	219	308	196	318	170	284

*Ocean water contains approximately 18,200 parts per million of chloride
a For location see Figure D-5
b Releases of stored water from Shasta Lake commenced in 1944
c Average taken as mean annual unimpaired flow at foothill stations of major tributaries for 50-year period, October 1910 through September 1960, and do not include runoff from minor tributaries and from valley floor

FIGURE D-5

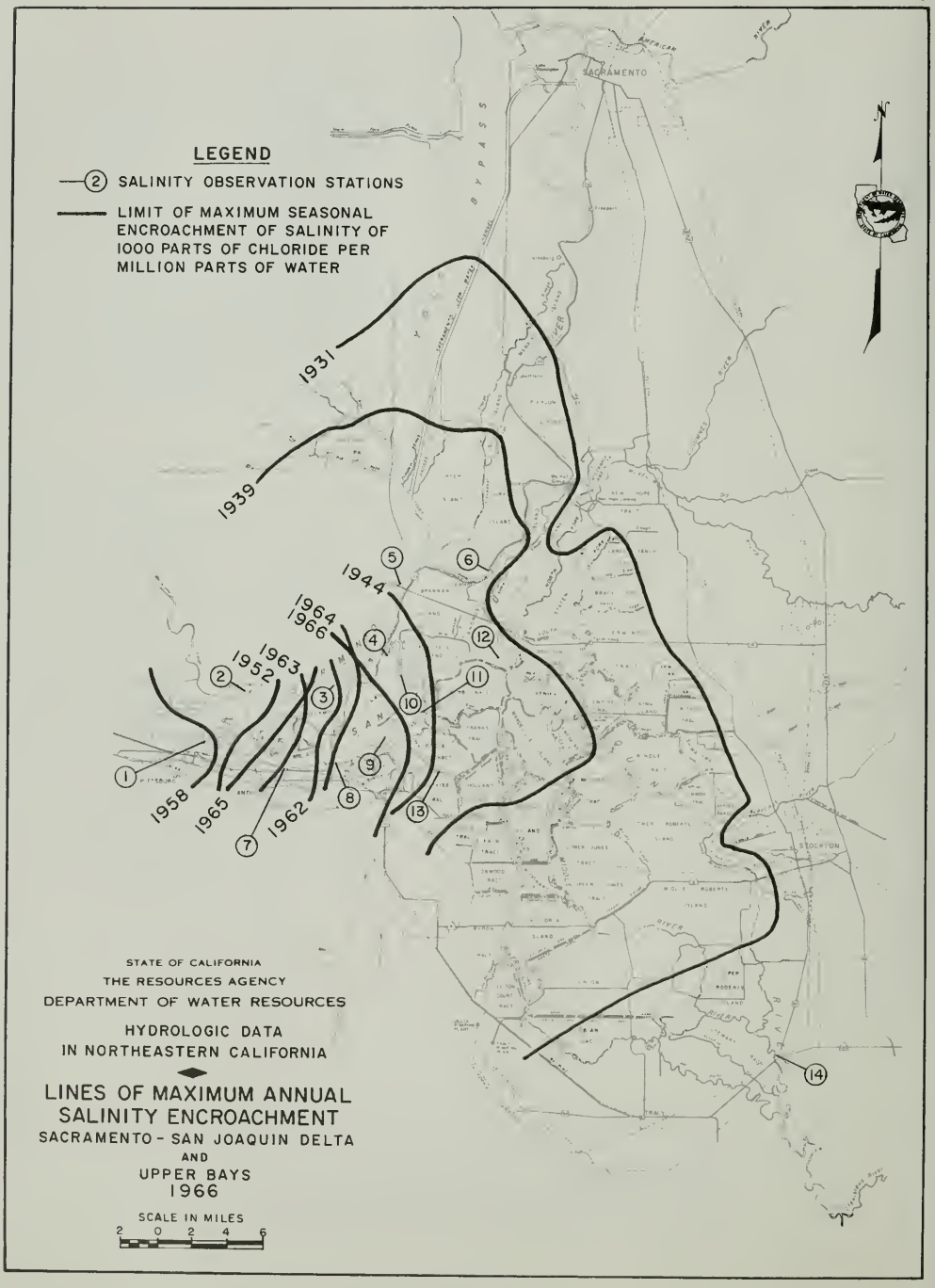

LEGEND
2 SALINITY OBSERVATION STATIONS
LIMIT OF MAXIMUM SEASONAL ENCROACHMENT OF SALINITY OF 1000 PARTS OF CHLORIDE PER MILLION PARTS OF WATER
1931
1939
1944
1964
1966
1963
1952
1958
1965
1962
SACRAMENTO
STOCKTON
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
HYDROLOGIC DATA
IN NORTHEASTERN CALIFORNIA
LINES OF MAXIMUM ANNUAL SALINITY ENCROACHMENT
SACRAMENTO - SAN JOAQUIN DELTA
AND
UPPER BAYS
1966
SCALE IN MILES
2 0 2 4 6

TABLE D-7

SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS*
In parts of chloride per million parts of water

Station		October 1965							
		2	6	10	14	18	22	26	30
					Suisun Bay				
EO 3100.90	Crockett	8230						9000	7220
EO 3300.10	Martinez			ed3550	7710	6680	4740	6090	5540
EO 3200.90	Port Chicago	ed3230	3140	a3590	5400	2820	2760	3450	3400
EO 3200.00	Middle Point	3320	2590	2760	1130	284			d2000
B9 1070.10	Pittsburg			130	146	a139	bd62	97	a72
					Sacramento River Delta				
B9 1110.00	Collinsville								
B9 1140.50	Emmaton	a26	19	26	26	a17	17	22	a22
B9 1160.00	Threemile Slough Bridge	a13	12	11	a12	a11	10	14	a12
B9 1210.10	Rio Vista Bridge	b9	8	11	ad7	b7	8	7	6
B9 1600.10	Isleton Bridge	b8	7	6	7	b5	7	6	6
					San Joaquin River Delta				
B9 5020.00	Antioch	a42	27	50	a38	a27	35		a36
B9 5020.10	Antioch Bridge	a26	34	25	ad26	a22	26	29	a27
B9 5040.50	Jersey Island		d16	bd18	a17	a20	24	a17	a17
B9 5060.00	Threemile Slough	a14	16	13	a13		17	a16	a14
	False River	a13	15	15	a16	a17	18	a17	a15
B9 5100.00	San Andreas Landing	a15	15	16	14	a17	12	16	a14
	Dutch Slough	a21	22	a21	dr24	a24	27	a29	a29
B9 5820.00	Mossdale Bridge							103	

Station		November 1965							
		2	6	10	14	18	22	26	30
					Suisun Bay				
EO 3100.90	Crockett	7850	10200	9850	9910	9170	6870		6880
EO 3300.10	Martinez	6620	8610				a1400	2340	5220
EO 3200.90	Port Chicago	2980	3980	4960	4400	3690	1850	598	1770
EO 3200.00	Middle Point	2010	3750	3800	4520	ae2840			1690
B9 1070.10	Pittsburg	d82	65		a182	74	39		a21
					Sacramento River Delta				
B9 1110.00	Collinsville		49	148		31	26	a13	17
B9 1140.50	Emmaton	17	19	22	abd14	15	8	10	12
B9 1160.00	Threemile Slough Bridge	10	9	12	a11	10	9	a10	10
B9 1210.10	Rio Vista Bridge	7	8	8	8	7	8	9	11
B9 1600.10	Isleton Bridge	6	5	6	7	6	6	7	7
					San Joaquin River Delta				
B9 5020.00	Antioch	30	40	59	a65	49	24	a22	22
B9 5020.10	Antioch Bridge	25	27	25	34	32	33	26	a36
B9 5040.50	Jersey Island	bd20	18	a16	abd18	18	24	abd19	26
B9 5060.00	Threemile Slough		14	14	a15		15	ad17	
	False River	15	15	a15	a15	17	16	a19	31
B9 5100.00	San Andreas Landing								
	Dutch Slough	29	31	a33	a26	39	43	a49	56
B9 5820.00	Mossdale Bridge	57			bd66		d45		

*Samples taken at four-day intervals approximately one and one-half hours after high high tide.

a Taken after low high tide.
b Taken on following day.
c Taken two days later.
d Taken over one hour off scheduled time.
e Taken on preceding day.
r Taken two days earlier.

TABLE D-7

SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS
In parts of chloride per million parts of water

Station		December 1965							
		2	6	10	14	18	22	26	30
					Suisun Bay				
B0 3100.90	Crockett	6840	ed9370	8420	3810		6930	5840	5810
B0 3300.10	Martinez	6220				5990	5380		
B0 3200.90	Port Chicago		4180		916	1770	2240	932	1840
B0 3200.00	Middle Point	2330	3590	a1520	a772	488	1840	461	1320
B9 1070.10	Pittsburg				a44	37	34	bd34	d33
					Sacramento River Delta				
B9 1110.00	Collinsville	17		a21	21	18	12	a18	20
B9 1140.50	Emmaton	12	13	15	15	14	14	bd13	16
B9 1160.00	Threemile Slough Bridge	7	12	13	12	8			8
B9 1210.10	Rio Vista Bridge	7	11	6	6	8	7	8	7
B9 1600.10	Isleton Bridge	6	6	5	5	7	6	9	6
					San Joaquin River Delta				
B9 5020.00	Antioch	25	35	41	44	35	32	a31	33
B9 5020.10	Antioch Bridge**	17	20	26	22	23	20	18	21
B9 5040.50	Jersey Island		bd34	a36	bd34		cd29	a30	31
B9 5060.00	Threemile Slough	27	33	28	d22	d26	8		
	False River	30	28	a35	27	24	a25		d28
B9 5100.00	San Andreas Landing	29	31	22	20	20	d22	27	17
	Dutch Slough	59	63	a56	50	46	a45	a46	46
B9 5820.00	Mossdale Bridge								

Station		January 1966							
		2	6	10	14	18	22	26	30
					Suisun Bay				
B0 3100.90	Crockett	5380	4250	2690	3210		5210	4310	6300
B0 3300.10	Martinez						4900	3260	5020
B0 3200.90	Port Chicago	1670	1120	56	132	1590	1050	310	2680
B0 3200.00	Middle Point		a59	37	a30		580	33	2990
B9 1070.10	Pittsburg				36		30	a26	31
					Sacramento River Delta				
B9 1110.00	Collinsville	16	19	17	12	12	a12	14	10
B9 1140.50	Emmaton	12	15	a12	bd10	12	13	12	10
B9 1160.00	Threemile Slough Bridge	14	16		8	12	a14	10	10
B9 1210.10	Rio Vista Bridge	9	13	ad10	10	10	7	9	6
B9 1600.10	Isleton Bridge	8	10	7	6	7	6	6	5
					San Joaquin River Delta				
B9 5020.00	Antioch	34	35	a40	36	28	30	35	32
B9 5020.10	Antioch Bridge**	19	20	32	26	26	29	29	33
B9 5040.50	Jersey Island	29	a41	a47	42	bd33	32	bd31	
B9 5060.00	Threemile Slough		34	a27		24	28	21	29
	False River	30	35	a32	28	29	29	35	32
B9 5100.00	San Andreas Landing	24	36	24	9	23	29	27	16
	Dutch Slough	63	63	a68	65	66	a55	64	d64
B9 5820.00	Mossdale Bridge		a42				a80	118	

*Samples taken at four-day intervals approximately one and one-half hours after high high tide.

a Taken after low high tide.
b Taken on following day.
c Taken two days later.
d Taken over one hour off scheduled time.
e Taken on preceding day.
f Taken two days earlier.
** Chloride values computed from conductivity recorder

TABLE D-7

SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS
In parts of chloride per million parts of water

Station		February 1966							
		2	6	10	14	18	22	26	30
					Suisun Bay				
BO 3100.90	Crockett	5900	6500	4000	6330	7560	6870	6150	
BO 3300.10	Martinez					a2030	5370		
BO 3200.90	Port Chicago	2050	1190	50	1810	3240	1450	a108	
BO 3200.00	Middle Point	1320	619	a33	104	617	1100	a68	
B9 1070.10	Pittsburg	bd38	d36	abd41	d41	36	42	40	
					Sacramento River Delta				
B9 1110.00	Collinsville	15	19	20		24	a24	20	
B9 1140.50	Emmaton	13	15	16	17	21	22		
B9 1160.00	Threemile Slough Bridge	14	15	31	13	15	19	17	
B9 1210.10	Rio Vista Bridge	8	11	9	9	10	11	11	
B9 1600.10	Isleton Bridge	6	10	7	5	8	9	9	
					San Joaquin River Delta				
B9 5020.00	Antioch	36	35	40	43	36	49	46	
B9 5020.10	Antioch Bridge**	23	36	41	46	45	53	53	
B9 5040.50	Jersey Island	40		58	53	51	a51	52	
B9 5060.00	Threemile Slough	24			41		41	29	
	False River	35	ad39	45	bd51	44	a44	44	
B9 5100.00	San Andreas Landing	29	36	30	33	36	35	28	
	Dutch Slough	74	76	61	75	80	83	79	
B9 5820.00	Mossdale Bridge	a74	d46		bd88	a91	ad96	d119	

Station		March 1966							
		2	6	10	14	18	22	26	30
					Suisun Bay				
BO 3100.90	Crockett	7360	8490	8020		6730		7800	5760
BO 3300.10	Martinez					a3820	a3550	5270	4200
BO 3200.90	Port Chicago	3250	3140	1670	1730	2030	317	248	158
BO 3200.00	Middle Point	1980	2050	a422	ae197	908	101	1290	
B9 1070.10	Pittsburg		39			28		23	22
					Sacramento River Delta				
B9 1110.00	Collinsville		28		21	14	12	13	15
B9 1140.50	Emmaton	22	22	21	20	15	8	11	13
B9 1160.00	Threemile Slough Bridge	16	17	16	13	8	9	8	10
B9 1210.10	Rio Vista Bridge	8	12	16	9	8	a9	6	8
B9 1600.10	Isleton Bridge	6	10	6	6	4	6	5	7
					San Joaquin River Delta				
B9 5020.00	Antioch	ed39	39	44	35	30	30	23	19
B9 5020.10	Antioch Bridge**	56	54	48	43	33	32	26	23
B9 5040.50	Jersey Island	44	52	35	34	bd30	a38	28	bd29
B9 5060.00	Threemile Slough	32	25	24	23	15		17	17
	False River	38	35	32	29	25	22	23	20
B9 5100.00	San Andreas Landing	8	22	16	7	15	15	13	8
	Dutch Slough	55	72	69	70	65	a43		34
B9 5820.00	Mossdale Bridge	a118		122		a61	a196	201	

*Samples taken at four-day intervals approximately one and one-half hours after high high tide.

a Taken after low high tide.
b Taken on following day
c Taken two days later
d Taken over one hour off scheduled time
e Taken on preceding day
f Taken two days earlier
** Chloride values computed from conductivity recorder

TABLE D-7

SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS*
In parts of chloride per million parts of water

Station		April 1966							
		2	6	10	14	18	22	26	30
					Suisun Bay				
EO 3100.90	Crockett	8510	8360		5570	10400	8490	8720	9420
EO 3300.10	Martinez	A4950	5150	2900	d1630		6570	5550	
EO 3200.90	Port Chicago	1760	2150		468	4360	3680	4320	ed3820
EO 3200.00	Middle Point	1670	1050	1050	261	3430	2610	2400	
B9 1070.10	Pittsburg	23	abd26	29	20	a48	a46	bd153	
					Sacramento River Delta				
B9 1110.00	Collinsville	14			13	a17	a15	83	a49
B9 1140.50	Emmaton		14	13	8	a9	13	d24	a23
B9 1160.00	Threemile Slough Br.	9	a6	7	7	a8	a11	10	a8
B9 1210.10	Rio Vista Bridge	7	5	6	5	5	5	11	6
B9 1600.10	Isleton Bridge	6	5	5	4	5	5	5	4
					San Joaquin River Delta				
B9 5020.00	Antioch	20	a24	21	18	a21	a26	57	a75
B9 5020.10	Antioch Bridge	23	23	20	19	16	18	22	28
B9 5040.50	Jersey Island		bd23	24	15	abd11	a14	24	
B9 5060.00	Threemile Slough				11	a9	a8		
	False River	21	21	ed17	13	aed13	12	d14	a11
B9 5100.00	San Andreas Landing	12	12	6	5	a7	a8	10	a7
	Dutch Slough	36	27	d23	28	a26	22	13	a17
B9 5820.00	Mossdale Bridge								

Station		May 1966							
		2	6	10	14	18	22	26	30
					Suisun Bay				
EO 3100.90	Crockett	10000	11400		9340	9180	11400	9630	10400
EO 3300.10	Martinez		a5420			7210		ae4330	8530
EO 3200.90	Port Chicago	4030	5560	5170	5330	4650	6090	4950	4660
EO 3200.00	Middle Point		4710		a1650		a2320	3150	4170
B9 1070.10	Pittsburg	a170	a320	382	a217	a126			a348
					Sacramento River Delta				
B9 1110.00	Collinsville	a65	437	490	a108	a39	485	258	a202
B9 1140.50	Emmaton	a32	a59	85		a28	69	110	a63
B9 1160.00	Threemile Slough Br.	a10	35	18	a13	a12	23	55	a26
B9 1210.10	Rio Vista Bridge	6	10	9	9	8	9	9	10
B9 1600.10	Isleton Bridge	8	8	7	7	7	8	8	10
					San Joaquin River Delta				
B9 5020.00	Antioch	a73	a97	223	a88	a53	181	180	a112
B9 5020.10	Antioch Bridge**	36	102	90	56	39	73	87	117
B9 5040.50	Jersey Island			45	a15	28	a19	45	a22
B9 5060.00	Threemile Slough	a8	a9	17		a11		16	a20
	False River	bd15	24	15	a12	a28	14	16	a18
B9 5100.00	San Andreas Landing	a8	a7	9	a8	a8	7	8	a10
	Ditch Slough	a17	ad19	17	a18	d18	17	20	a19
B9 5820.00	Mossdale Bridge	195							

*Samples taken at four-day intervals approximately one and one-half hours after high high tide.

a Taken after low high tide
b Taken on following day
c Taken two days later
d Taken over one hour off scheduled time
e Taken on preceding day
f Taken two days earlier
** Chloride values computed from conductivity recorder

TABLE D-7

SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS
In parts of chloride per million parts of water

Station		June 1966							
		2	6	10	14	18	22	26	30
					Suisun Bay				
EO 3100.90	Crockett	11100	ad10300	e11600	10500	13200	13700	e12000	13600
EO 3300.10	Martinez	a5670		a8370	10500	11900		a8850	
EO 3200.90	Port Chicago	6550	6870	35490	8300	9830	9400	38120	10700
EO 3200.00	Middle Point		5960	34760	6850	6220		a5920	
B9 1070.10	Pittsburg	a511	a581	a810	abd1150	a1370		a2170	
					Sacramento River Delta				
B9 1110.00	Collinsville	a467	1260	a889	a703		2940		a1980
B9 1140.50	Emmaton	a81	d234	d292	a180	a347	1110	abd699	a842
B9 1160.00	Threemile Slough Bridge	a41		a49	a47	a290	651	a220	a342
B9 1210.10	Rio Vista Bridge	17	16	18	22	50	63	71	110
B9 1600.10	Isleton Bridge	10	12	12	d12	22	16	18	16
					San Joaquin River Delta				
B9 5020.00	Antioch	a173	628	a487	a356	a837	2510	a1250	a1370
B9 5020.10	Antioch Bridge**	a147	270	272	342	830	1025	1065	1675
B9 5040.50	Jersey Island	70	121	a71	a87	bd570	553	520	a257
B9 5060.00	Threemile Slough		36	a45	a46	a70	d244		a227
	False River	a36	90	a38	ad45	bd386	344	a196	d592
B9 5100.00	San Andreas Landing	a11	11	a12	a14	a21	16	a17	a33
	Dutch Slough	20	24	a32	a42	83	112	a142	a163
B9 5820.00	Mossdale Bridge		218	d208	226	255	249	a228	222

Station		July 1966							
		2	6	10	14	18	22	26	30
					Suisun Bay				
EO 3100.90	Crockett	14200		312300	312500	14800	13700	314300	15100
EO 3300.10	Martinez								
EO 3200.90	Port Chicago	9750	8540	37430	10400	a7770	8460	39210	9230
EO 3200.00	Middle Point				2620	9450		36570	9750
B9 1070.10	Pittsburg	a2030			a2280		a2880	ad2530	a2360
					Sacramento River Delta				
B9 1110.00	Collinsville	a1990	3170	a2200		a2630	a3240	a2220	
B9 1140.50	Emmaton	a850	a1090	a577	a754	a834	a1060	a671	a1090
B9 1160.00	Threemile Slough Bridge	a334	518	a245	a388	570	a336	a406	a366
B9 1210.10	Rio Vista Bridge	113	150	72	81	153	124	123	195
B9 1600.10	Isleton Bridge	22	9	9	8	10	8	13	13
					San Joaquin River Delta				
B9 5020.00	Antioch	2920	2220	a1460	a1620	2930	a2160	a1310	a1820
B9 5020.10	Antioch Bridge**	1400	1220	1325	1400	1525	1325	1530	1470
B9 5040.50	Jersey Island	1200	850	abd289	a373	a444	a800	938	a511
B9 5060.00	Threemile Slough	a133	ad174		a252			a244	a269
	False River	597	593	a276	a332	892	ad434	a349	a427
B9 5100.00	San Andreas Landing	a32	143	a53	61	a56	a60	a42	a66
	Dutch Slough	218	272	a282	a353	391	a356	a338	d392
B9 5820.00	Mossdale Bridge	230	211		255	242	a239	284	268

*Samples taken at four-day intervals approximately one and one-half hours after high high tide

a Taken after low high tide
b Taken on following day
c Taken two days later
d Taken over one hour off scheduled time
e Taken on preceding day
f Taken two days earlier
** Chloride values computed from conductivity recorder

TABLE D-7

SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS
In parts of chloride per million parts of water

Station		August 1966							
		2	6	10	14	18	22	26	30
					Suisun Bay				
E0 3100.90	Crockett		14000	e13700	15300	14100	13300	e13200	11400
E0 3300.10	Martinez					12000			
E0 3200.90	Port Chicago	9700		a7450		9200	8700	9250	8950
E0 3200.00	Middle Point	d8380	7180	e9430	10100	d7800	7850		7080
B9 1070.10	Pittsburg	a2240	a2550	ad2600	a2190	a1870		a1740	1910
					Sacramento River Delta				
B9 1110.00	Collinsville	3900	a2510	a2300		2860	a1930	a1760	
B9 1140.50	Emmaton	1370	a357	e940	a527	648	abd230	a361	
B9 1160.00	Threemile Slough Bridge	492	a218	a185	a331	236	a176	a128	a153
B9 1210.10	Rio Vista Bridge	29	63	88	105	83	75	23	32
B9 1600.10	Isleton Bridge	9	9	bd9	8	9	8	12	6
					San Joaquin River Delta				
B9 5020.00	Antioch	2380	a1610	a1330	a1200	1870	a844	a756	a955
B9 5020.10	Antioch Bridge**	1270	1090	1480	1260	980	1020	750	720
B9 5040.50	Jersey Island	1130	a525						
B9 5060.00	Threemile Slough	a220			ad120	a150		a84	a102
	False River	745	a314	ad270	a318	475	a188	a207	256
B9 5100.00	San Andreas Landing	100	56	a56	a66	d61	a37	a35	a40
	Dutch Slough	377	a372	a370	a420	376	a278	a242	d204
B9 5820.00	Mossdale Bridge	214	a265	a264	272	261	a273	240	225

Station		September 1966							
		2	6	10	14	18	22	26	30
					Suisun Bay				
E0 3100.90	Crockett	12600	13700	e12100	12100	12900	e10900	10900	14200
E0 3300.10	Martinez					bd6760	e9400	7760	a9570
E0 3200.90	Port Chicago	7100	8300		7180	7320	e6500	6670	7240
E0 3200.00	Middle Point	6380	6700	e5410					
B9 1070.10	Pittsburg	a1300	bd1280	a860	a942	a845	a1180		1180
					Sacramento River Delta				
B9 1110.00	Collinsville	1580	a1190		a688	a755	a833	a724	a952
B9 1140.50	Emmaton	440	a350	a112	abd111	143	a116	ad130	196
B9 1160.00	Threemile Slough Bridge	114	a67	a65	a57	a60	a47	a41	46
B9 1210.10	Rio Vista Bridge	51	12	20	35	33	23	18	18
B9 1600.10	Isleton Bridge	11	12	16	15		10	8	9
					San Joaquin River Delta				
B9 5020.00	Antioch	898	a560	a605	652	a469	a287	a255	598
B9 5020.10	Antioch Bridge**	420	580	400	300	270	280	225	255
B9 5040.50	Jersey Island							a58	118
B9 5060.00	Threemile Slough	a77	a60	a45	a34		a28		28
	False River	181	a116	a101	106	a70	a57	a49	a65
B9 5100.00	San Andreas Landing	a23	28	a24	25	23	a20	a17	d15
	Dutch Slough	197	136	ad132	108	a87	a70	a64	a59
B9 5820.00	Mossdale Bridge	229	a220	a214	228	a226	a206		a204

*Samples taken at four-day intervals approximately one and one-half hours after high high tide
a Taken after low high tide
b Taken on following day
c Taken two days later
d Taken over one hour off scheduled time
e Taken on preceding day
f Taken two days earlier
** Chloride values computed from conductivity recorder

TABLE D 8

WATER TEMPERATURES
DAILY MAXIMUM and MINIMUM
(IN DEGREES FAHRENHEIT)

WATER YEAR	STATION NO.	STATION NAME
1966	A 0 2105	Sacramento River at Sacramento Weir

DAY	OCT.		NOV.		DEC.		JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		DAY
	MAX.	MIN	MAX.	MIN	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN	MAX	MIN.	MAX.	MIN	MAX.	MIN.	
1	63	61	59	58	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	64	62	67	65	70	69	68	66	67	65	1
2	63	62	58	57											65	62	67	64	69	68	69	67	68	66	2
3	64	62	NR	NR	NR										66	64	68	65	69	68	70	68	70	68	3
4	63	62													65	64	69	67	69	68	72	69	71	68	4
5	63	62													65	64	69	67	68	67	72	70	73	69	5
6	63	61													66	64	68	66	69	67	73	71	72	70	6
7	64	62													66	64	67	65	68	66	71	69	71	69	7
8	65	63													65	64	69	66	68	67	71	69	71	69	8
9	64	63									NR	NR			65	64	69	67	68	67	70	69	71	69	9
10	64	63									53	52			65	63	71	68	68	66	70	69	71	69	10
11	64	62									53	52			64	62	71	69	68	66	69	68	70	68	11
12	64	63									53	53			65	62	72	69	67	66	70	69	69	67	12
13	64	62									NR	NR			67	65	73	70	68	66	70	68	68	66	13
14	63	61													67	66	74	71	68	66	69	67	67	65	14
15	62	61													67	66	74	72	69	66	70	68	67	65	15
16	61	59													68	66	74	72	69	67	70	69	68	66	16
17	59	58													68	66	74	72	69	66	69	68	67	66	17
18	58	57													69	67	75	72	69	67	69	68	67	66	18
19	58	57													70	68	75	73	70	68	68	67	68	66	19
20	58	57													71	69	73	71	70	68	67	66	68	67	20
21	NR	NR											NR	NR	70	68	71	68	71	68	67	65	68	67	21
22													58	56	69	67	68	66	71	69	69	66	69	67	22
23													58	57	70	67	67	65	72	70	68	66	70	68	23
24													NR	NR	70	68	68	66	71	69	68	67	69	68	24
25	NR	NR													71	68	69	67	71	68	68	66	68	67	25
26	60	59													71	68	69	67	71	69	68	66	68	66	26
27	60	59											NR	NR	71	69	70	68	70	68	68	66	68	66	27
28	59	58											61	59	70	68	71	69	70	68	69	67	68	66	28
29	59	58							NR	NR			62	60	68	66	70	69	70	68	68	66	69	67	29
30	60	58	NR	NR									62	60	68	66	71	69	70	67	67	66	69	67	30
31	59	58	-	-	NR	NR	-	-	-	-	NR	NR	-	-	68	66	-	-	68	65	67	65	-	-	31
AVG.	NR		NR		NR		NR		NR		NR		NR		67		69		68		68		68		AVG
MAX	NR		NR		NR		NR		NR		NR		NR		71		75		72		73		73		MAX.
MIN		NR		NR		NR		NR		NR		NR		NR		62		64		65		65		65	MIN

YEARLY EXTREMES

MAXIMUM			MINIMUM		
TEMPERATURE	MO.	DAY	TEMPERATURE	MO.	DAY
75E	June	18,19	NR		

LOCATION			MAXIMUM TEMPERATURE OF RECORD		MINIMUM TEMPERATURE OF RECORD		PERIOD OF RECORD	
LATITUDE	LONGITUDE	1/4 SEC. T. & R B & M		DATE		DATE	FROM	TO
38 36 09	121 33 12	NE 29 9N 4E	76	July 5, 1965	43	Jan. 3, 1965	Nov. 14, 1964	Present

Station located 100' below weir, 6 miles North West of Sacramento

TABLE D 8

WATER TEMPERATURES
DAILY MAXIMUM and MINIMUM
(IN DEGREES FAHRENHEIT)

WATER YEAR	STATION NO.	STATION NAME
1966	AO 2170	Sacramento River at Fremont Weir, West End

DAY	OCT.		NOV.		DEC.		JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		DAY
	MAX.	MIN.	MAX.	MIN	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN	MAX.	MIN.	
1	61	61	56	56	49	49	45	45	46	46	48	48	61	60	63	62	66	65	68	68	65	65	64	63	1
2	61	61	56	56	49	49	45	45	46	46	49	48	61	60	64	63	66	66	68	67	67	65	64	63	2
3	61	61	56	56	49	49	45	44	47	46	49	49	61	60	66	64	66	65	67	66	67	66	66	64	3
4	61	61	56	56	49	49	44	44	47	47	49	49	60	60	66	65	66	65	67	66	68	67	67	66	4
5	61	61	56	56	49	48	44	44	46	46	49	49	60	60	66	65	66	65	67	66	68	67	68	68	5
6	61	61	55	55	48	48	45	44	46	46	49	49	61	60	65	65	65	64	67	66	68	67	68	68	6
7	61	61	55	55	48	48	45	45	47	46	49	49	61	61	65	65	64	64	66	66	68	68	68	68	7
8	61	61	55	55	48	48	46	45	48	48	50	49	61	61	66	65	65	64	66	65	68	68	68	68	8
9	62	61	55	55	48	48	46	46	48	48	51	50	61	60	66	66	66	65	65	65	68	68	68	68	9
10	62	61	55	55	48	48	46	46	48	48	52	51	60	59	66	66	67	66	65	65	69	68	68	68	10
11	62	61	55	55	48	48	46	46	48	48	52	52	59	59	66	66	68	67	65	65	67	67	68	68	11
12	62	61	55	55	48	48	46	46	48	48	52	52	59	58	66	66	68	67	65	65	67	67	67	67	12
13	62	62	55	55	48	48	46	46	48	48	52	52	58	57	67	66	68	68	65	65	67	67	66	65	13
14	62	61	55	54	48	48	46	46	48	48	54	52	57	56	68	68	69	68	65	65	67	67	66	65	14
15	61	60	54	54	48	48	46	46	48	48	55	54	57	56	67	67	70	69	65	65	67	67	66	65	15
16	60	59	54	54	48	47	46	46	48	48	55	55	60	58	66	66	70	70	65	65	67	67	65	65	16
17	59	58	54	54	47	46	46	46	48	48	55	54	61	60	66	66	70	70	65	65	67	67	65	65	17
18	58	56	54	54	46	46	46	46	49	48	54	52	61	61	67	66	71	70	66	65	67	67	65	65	18
19	56	56	55	54	46	46	46	46	49	49	52	52	62	61	68	67	71	70	66	65	67	67	65	65	19
20	56	56	55	55	46	46	46	45	50	49	52	51	62	60	68	67	71	69	66	66	67	67	66	65	20
21	56	56	55	54	46	46	45	45	50	50	52	52	60	59	68	68	69	67	66	66	66	66	66	65	21
22	56	56	54	54	46	45	45	44	50	50	52	52	59	58	68	67	67	66	67	66	66	66	66	66	22
23	56	56	54	53	45	44	44	44	51	50	52	52	59	58	67	67	66	65	67	66	66	65	66	65	23
24	56	56	53	52	44	44	45	44	51	51	52	52	60	59	67	67	65	65	67	67	66	65	65	65	24
25	56	56	52	52	45	44	46	45	50	50	54	52	63	61	68	67	66	65	67	67	65	65	65	63	25
26	56	56	52	51	44	44	46	45	50	50	55	54	63	62	68	67	67	66	67	67	65	65	65	63	26
27	56	56	51	50	45	44	46	45	50	48	56	55	63	62	68	68	68	67	67	67	65	65	65	64	27
28	56	56	50	50	45	45	46	45	48	48	57	56	62	62	68	68	68	67	67	67	65	65	65	65	28
29	56	56	50	50	45	45	46	46	-	-	58	57	62	61	68	67	68	68	67	67	65	65	65	65	29
30	56	56	50	49	45	45	46	46	-	-	59	58	62	61	67	66	68	68	67	66	65	64	65	65	30
31	56	56	-	-	45	45	46	46	-	-	60	59	-	-	66	65	-	-	66	65	64	63	-	-	31
AVG.	59		54		47		45		48		52		60		66		67		66		66		66		AVG.
MAX.	62		56		49		46		51		60		63		68		71		68		69		68		MAX.
MIN.		56		49		44		44		46		48		56		62		64		65		63		63	MIN.

YEARLY EXTREMES

MAXIMUM			MINIMUM		
TEMPERATURE	MO.	DAY	TEMPERATURE	MO.	DAY
71	June	18-20	44	Dec Jan	23-27 3-6, 22-24

LOCATION			MAXIMUM TEMPERATURE OF RECORD		MINIMUM TEMPERATURE OF RECORD		PERIOD OF RECORD	
LATITUDE	LONGITUDE	1/4 SEC. T. & R. B. & M.		DATE		DATE	FROM	TO
38 45 34	121 39 59	NW 32 1N 3E	72	July 3, 1965	44		June 23, 1965	Present

Station located 0.1 mile West of Weir, 4.0 miles South East of Knights Landing

(44) for many days.

TABLE D 8

WATER TEMPERATURES
DAILY MAXIMUM and MINIMUM
(IN DEGREES FAHRENHEIT)

WATER YEAR	STATION NO.	STATION NAME
1966	A 0 5135	Feather River at Yuba City

DAY	OCT.		NOV.		DEC.		JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		DAY
	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN	MAX.	MIN.	MAX.	MIN	MAX.	MIN.	MAX.	MIN	MAX.	MIN	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	
1	62	62	58	58	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	66	65	75	73	80	75	72	70	1
2	62	62	58	57													68	66	76	74	81	77	74	71	2
3	62	62	57	56													69	67	76	74	80	77	77	73	3
4	62	62	56	56													71	68	78	75	82	78	77	73	4
5	62	62	57	56											NR	NR	73	70	78	76	81	78	78	74	5
6	62	62	57	56											60	59	72	68	78	74	83	79	77	73	6
7	63	62	57	56											60	58	71	67	73	70	83	79	74	70	7
8	63	63	56	56											59	58	73	71	73	68	82	79	72	68	8
9	64	63	56	56											60	59	75	73	73	70	81	78	73	69	9
10	63	63	56	56											59	58	75	73	76	71	81	77	73	70	10
11	63	63	56	56											60	58	74	72	75	72	79	75	72	68	11
12	63	63	56	56											61	58	73	72	74	70	78	74	70	68	12
13	63	63	56	56											61	59	75	72	74	71	77	75	69	65	13
14	63	63	56	55											61	59	80	75	73	70	77	74	69	65	14
15	63	62	55	55											62	60	83	79	75	71	79	75	69	65	15
16	62	60	55	55											63	60	81	79	75	72	79	76	71	67	16
17	60	59	55	54											65	61	79	77	75	70	82	77	71	69	17
18	59	58	NR	NR											66	62	80	77	77	72	80	77	71	69	18
19	59	58													67	64	81	77	78	74	79	75	71	68	19
20	59	59													69	65	79	75	79	74	77	73	71	69	20
21	59	59													67	64	75	69	79	75	78	73	71	68	21
22	59	59													67	63	71	67	81	77	76	72	71	69	22
23	59	59													69	64	72	69	81	77	77	73	71	68	23
24	59	59													72	67	73	70	79	75	75	72	71	68	24
25	59	59													72	68	75	70	78	75	72	70	69	67	25
26	59	59													72	69	78	74	79	75	72	68	71	67	26
27	59	59													72	69	81	76	78	75	74	69	70	67	27
28	59	59													72	68	82	77	78	74	76	72	71	67	28
29	59	59							NR	NR					69	66	77	74	77	74	72	68	72	68	29
30	59	58	NR	NR									NR	NR	66	64	78	71	77	70	69	67	71	69	30
31	58	58			NR	NR	NR	NR			NR	NR			67	66	-	-	76	69	70	66	-	-	31
AVG.	61																74		75		76		70		AVG
MAX	64		NR		NR		NR		NR		NR		NR		NR		83		81		83		78		MAX.
MIN		58		NR		NR		NR		NR		NR		NR		NR		65		68		66		65	MIN.

YEARLY EXTREMES

MAXIMUM			MINIMUM		
TEMPERATURE	MO	DAY	TEMPERATURE	MO.	DAY
83E	June	15	NR		
	Aug.	6,7			

LOCATION			MAXIMUM TEMPERATURE OF RECORD		MINIMUM TEMPERATURE OF RECORD		PERIOD OF RECORD	
LATITUDE	LONGITUDE	1 4 SEC. T. & R. B. & M		DATE		DATE	FROM	TO
39 08 20	121 36 17	SE 23 15N 3E	89	July 29, 1964	38	January 1965	July 22, 1964	Present

Station located at Sacramento Northern Railroad Bridge. From May 5, 1966 to September 30, 1966 station relocated 1,000 feet upstream.

TABLE D 8

WATER TEMPERATURES
DAILY MAXIMUM and MINIMUM
(IN DEGREES FAHRENHEIT)

WATER YEAR	STATION NO.	STATION NAME
1966	A O 5177	Feather River at Sutter Butte Canal Company Intake near Gridley

DAY	OCT.		NOV.		DEC.		JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		DAY
	MAX.	MIN.	MAX.	MIN.	MAX	MIN.	MAX	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN	MAX.	MIN.	MAX	MIN	MAX	MIN	MAX	MIN.	MAX.	MIN.	
1	62	61	55	55	45	45	43	43	43	43	46	46	54	52	54	53E	62	61	70	69	73	71	69	67	1
2	62	61	55	55	45	45	43	42	43	43	46	45	54	53	55	54E	61	60	70	68	74	72	69	67	2
3	62	61	55	55	45	45	42	42	43	43	46	45	53	52	55	54E	61	59	69	68	75	74	69	67	3
4	62	60	55	55	45	45	42	42	43	43	45	44	53	52	56	53	61	59	70	68	76	74	70	67	4
5	62	61	55	55	45	45	45	42	44	43	44	44	53	52	56	55	60	59	70	68	76	74	71	68	5
6	62	61	56	56	45	45	45	45	45	44	45	44	53	52	55	54	60	58	70	68	76	74	70	68	6
7	63	62	55	55	45	45	45	44	45	45	45	45	53	52	55	54	60	58	70	68	75	74	70	68	7
8	63	62	55	55	45	44	45	44	44	44	46	45	53	52	55	54	61	59	69	68	75	74	69	67	8
9	62	62	55	55	44	44	44	44	44	44	46	46	52	52	55	55	64	61	69	68	75	73	70	68	9
10	62	61	55	54	44	44	44	44	44	44	47	46	52	50	55	54	65	62	69	68	75	73	70	67	10
11	62	61	54	54	44	44	44	44	44	43	47	46	50	48	55	54	65	63	70	68	74	73	69	67	11
12	61	61	54	54	44	44	44	43	43	43	46	46	48	48E	56	54	65	64	69	67	74	72	68	66	12
13	61	61	54	54	44	44	43	42	43	42	47	47	48	48E	57	55	67	64	69	68	74	73	67	65	13
14	60	60	54	54	44	44	42	42	42	42	47	47	49	48E	57	56	68	66	69	67	74	72	66	64	14
15	60	59	53	53	44	43	43	43	42	42	47	47	50	49E	57	56	68	67	68	67	74	73	66	64	15
16	59	58	53	52	43	42	43	43	42	42	47	45	52	50E	58	56	69	68	68	67	74	72	66	64	16
17	58	57	52	52	42	42	43	43	42	42	47	45	52	52E	58	57	70	68	69	67	75	73	66	64	17
18	57	57	52	52	42	42	43	43	43	43	45	45	52	52E	59	58	71	69	69	68	75	73	66	65	18
19	58	57	52	50	42	41	43	42	44	43	46	45	52	49E	60	58	72	70	70	68	75	73	67	65	19
20	58	58	50	50	41	41	42	41	45	44	47	46	50	48E	61	60	71	69	70	69	74	72	67	65	20
21	58	58	50	50	41	41	41	41	45	45	47	46	50	48E	62	60	69	67	72	71	74	72	68	66	21
22	58	58	50	50	41	40	41	41	45	45	48	47	52	50E	61	60	68	66	73	71	74	72	67	66	22
23	58	57	50	50	40	40	41	41	46	45	49	49	53	52E	62	60	68	66	73	72	73	72	68	66	23
24	57	57	50	50	41	41	41	41	47	46	50	49	54	50E	62	60	67	66	73	71	72	71	68	66	24
25	57	57	50	48	41	41	42	42	47	46	50	49	55	53E	63	61	68	65	72	71	72	70	68	66	25
26	57	57	47	46	41	41	42	42	47	46	52	50	55	54E	64	62	68	66	72	71	71	70	68	66	26
27	57	56	46	46	41	41	42	42	46	46	53	51	55	53E	64	63	70	68	72	71	71	69	67	65	27
28	56	56	46	45	41	41	42	42	46	46	53	52	54	53E	63	63	71	69	72	71	71	70	67	66	28
29	56	56	45	45	43	41	42	42	-	-	53	52	54	52E	63	62	71	69	72	71	71	68	68	66	29
30	56	56	45	45	43	43	42	42	-	-	53	52	54	52E	63	62	71	69	71	70	69	68	68	66	30
31	56	55	-	-	43	43	43	42	-	-	53	52	-	-	63	61	-	-	72	69	68	67	-	-	31
AVG.	59		52		43		43		44		47		52		58		65		70		73		67		AVG.
MAX.	63		56		45		45		47		53		55		64		72		73		76		71		MAX.
MIN.		55		45		40		41		42		44		48		53		58		67		67		64	MIN.

YEARLY EXTREMES

MAXIMUM			MINIMUM		
TEMPERATURE	MO.	DAY	TEMPERATURE	MO.	DAY
76	Aug.	4,5,6	40	Dec.	22,23

LOCATION			MAXIMUM TEMPERATURE OF RECORD		MINIMUM TEMPERATURE OF RECORD		PERIOD OF RECORD	
LATITUDE	LONGITUDE	1/4 SEC. T & R. B. & M.		DATE		DATE	FROM	TO
		SE 33 19N 3E	87.5	8-10-59	34	1-26-62	7-13-56	Present

Station located on headwall of inlet structure to Sutter Butte Canal.

TABLE D 8

WATER TEMPERATURES
DAILY MAXIMUM and MINIMUM
(IN DEGREES FAHRENHEIT)

WATER YEAR	STATION NO	STATION NAME
1966	8 9 1700	Sacramento River at Walnut Grove

DAY	OCT.		NOV.		DEC.		JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		DAY
	MAX.	MIN.	MAX.	MIN	MAX.	MIN	MAX.	MIN	MAX	MIN	MAX.	MIN	MAX	MIN	MAX.	MIN	MAX.	MIN	MAX.	MIN	MAX	MIN	MAX.	MIN	
1	64	64	59	58	56	51	49	44	51	47	53	52	58	56	65	63	70	67	73	71	73	72	68	67	1
2	64	64	59	57	56	50	50	44	51	48	53	52	59	56	66	64	69	67	72	71	73	72	67	67	2
3	64	64	58	56	56	49	50	43	51	47	52	51	59	58	68	64	69	66	73	71	73	72	67	67	3
4	64	64	57	56	55	49	49	43	50	47	51	50	60	58	68	66	69	66	73	71	74	72	68	67	4
5	64	64	56	56	54	48	48	41	50	47	51	50	59	58	69	66	69	66	73	71	75	73	69	68	5
6	64	64	56	56	54	48	48	43	50	48	51	50	60	58	69	66	70	67	73	71	76	72	70	68	6
7	64	64	56	56	52	46	47	45	51	49	51	51	60	59	69	66	69	66	72	70	76	72	70	69	7
8	64	64	56	56	52	46	48	45	51	49	51	51	60	59	69	67	69	67	71	70	77	73	70	68	8
9	64	64	57	57	52	46	49	46	52	51	52	52	59	58	68	66	69	67	71	69	77	73	70	69	9
10	64	64	57	56	51	46	49	47	52	50	52	52	59	58	67	65	70	67	71	69	74	72	71	69	10
11	64	64	57	56	51	46	49	47	53	50	52	52	58	58	67	64	71	67	71	70	75	72	70	69	11
12	64	64	57	55	51	46	49	47	53	50	52	52	59	58	67	65	73	68	71	70	74	72	70	69	12
13	64	64	56	55	52	47	49	47	53	50	52	52	58	58	68	65	73	68	73	69	73	72	69	69	13
14	64	64	57	55	52	48	49	46	54	50	52	52	58	58	68	65	76	69	71	69	72	70	68	68	14
15	64	64	57	55	52	47	50	46	53	51	52	52	58	58	67	65	77	70	71	69	72	70	69	69	15
16	64	63	57	55	51	46	50	46	53	50	52	52	59	58	68	65	78	71	71	69	72	70	69	69	16
17	63	62	56	54	51	45	50	46	52	50	52	52	60	58	69	65	78	71	71	70	73	70	69	69	17
18	62	60	57	55	51	43	50	46	52	50	52	52	60	60	70	66	79	72	71	70	73	71	69	69	18
19	61	59	57	55	50	43	50	46	52	51	51	51	61	60	71	68	78	72	72	70	73	71	69	68	19
20	60	59	57	55	49	43	50	46	53	52	51	51	61	60	74	68	78	73	72	70	72	71	69	68	20
21	60	59	57	54	49	42	50	45	53	52	51	51	61	60	74	69	77	72	73	69	71	70	69	68	21
22	60	59	58	54	48	41	49	45	53	52	51	51	61	60	74	68	74	72	74	71	71	70	69	68	22
23	59	59	56	53	48	41	49	45	53	53	51	51	60	60	73	68	73	71	74	72	71	70	69	68	23
24	59	59	56	52	48	40	49	45	52	52	51	51	61	60	74	69	71	69	75	72	71	70	69	69	24
25	60	60	56	52	48	41	50	47	53	53	52	51	63	61	74	68	71	69	75	72	70	69	69	69	25
26	60	60	56	51	48	42	50	47	53	53	53	52	64	62	74	69	71	69	75	72	70	69	69	69	26
27	60	60	56	52	48	42	50	47	53	53	53	52	64	62	75	69	72	69	75	72	69	68	69	69	27
28	60	60	56	51	48	42	50	47	53	53	53	53	64	62	74	69	72	70	75	72	69	68	69	69	28
29	60	60	56	51	48	43	50	47	-	-	54	53	64	62	73	68	73	70	74	72	69	68	69	69	29
30	60	59	55	50	48	44	51	48	-	-	55	54	64	63	72	68	73	70	74	72	68	68	68	68	30
31	59	59	-	-	49	44	51	48	-	-	56	55	-	-	72	68	-	-	73	71	68	67	-	-	31
AVG.	62		56		48		48		51		52		60		68		71		72		72		69		AVG
MAX	64		59		56		51		54		56		64		75		79		75		77		71		MAX.
MIN		59		50		40		41		47		50		56		63		66		69		67		67	MIN

YEARLY EXTREMES

MAXIMUM			MINIMUM		
TEMPERATURE	MO.	DAY	TEMPERATURE	MO	DAY
79	June	18	40	Dec.	24

LOCATION			MAXIMUM TEMPERATURE OF RECORD		MINIMUM TEMPERATURE OF RECORD		PERIOD OF RECORD	
LATITUDE	LONGITUDE	1 4 SEC T. & R 8 & M		DATE		DATE	FROM	TO
38 14 22	121 30 57	SW35 5N 4E	79 79 for many days		40	12-24-65	1-15-64	Present

TABLE D 8

WATER TEMPERATURES
DAILY MAXIMUM and MINIMUM
(IN DEGREES FAHRENHEIT)

WATER YEAR	STATION NO.	STATION NAME
1966	B 9 5340	Old River at Clifton Court Ferry

DAY	OCT.		NOV.		DEC.		JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		DAY
	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	
1	61		NR		51		48		50		53		62		64		NR		76		75		67		1
2	61		NR		50		48		50		51		66		65		NR		72		78		68		2
3	61		NR		50		47		50		50		66		66		NR		72		78		70		3
4	61		NR		50		47		50		49		66		69		67		72		78		75		4
5	64		NR		50		46		50		49		67		68		68		74		79		75		5
6	68		NR		50		47		50		52		68		68		69		74		79		73		6
7	68		NR		50		48		50		53		68		69		67		73		80		74		7
8	69		61		50		48		50		55		68		69		68		71		80		74		8
9	69		58		50		50		50		53		67		68		68		73		80		74		9
10	69		57		50		50		50		55		65		67		67		73		80		77		10
11	68		57		49		50		45		56		63		67		66		73		80		75		11
12	68		55		49		50		47		58		62		67		69		71		80		71		12
13	67		NR		49		49		47		59		62		68		71		69		79		69		13
14	66		NR		49		49		45		60		62		NR		75		69		78		66		14
15	63		54		49		49		45		59		65		NR		81		69		78		66		15
16	58		55		48		49		45		59		68		NR		83		72		78		69		16
17	57		55		48		48		46		59		68		NR		81		71		79		69		17
18	59		56		45		48		47		58		67		NR		80		72		79		70		18
19	60		56		45		48		48		59		63		NR		80		74		79		70		19
20	61		56		45		47		49		61		62		NR		82		73		76		70		20
21	62		57		44		46		50		57		63		NR		78		73		76		70		21
22	62		57		44		46		51		55		65		NR		72		76		76		NR		22
23	62		57		44		46		53		54		65		NR		72		78		76				23
24	62		NR		43		45		53		55		68		NR		72		78		75				24
25	63		NR		43		45		54		57		70		NR		72		76		73				25
26	62		NR		44		45		54		58		67		NR		72		77		72				26
27	64		NR		45		45		53		58		65		NR		73		77		70				27
28	64		NR		45		45		53		58		64		NR		75		76		73				28
29	63		NR		45		47		-		58		64		NR		78		76		71				29
30	62		NR		46		47		-		60		64		NR		76		75		67				30
31	61		-		48		48		-		60		-		NR		-		73		65				31
AVG.	63		-		47		47		49		56		65		-		-		73		76				AVG.
MAX. MIN.																									MAX. MIN.

All Figures picked from chart at HH tide.

YEARLY EXTREMES

MAXIMUM			MINIMUM		
TEMPERATURE	MO.	DAY	TEMPERATURE	MO.	DAY
83E	June	16	43E	Dec.	24,25

LOCATION			MAXIMUM TEMPERATURE OF RECORD		MINIMUM TEMPERATURE OF RECORD		PERIOD OF RECORD	
LATITUDE	LONGITUDE	1 4 SEC. T. & R. B. & M		DATE		DATE	FROM	TO
37 49 28	121 33 05	SE 20 1S 4E	83	July 25, 1964	43		10-18-63	Present

Station located approximately 2,000' below junction with Grant Line Canal.

TABLE D 8

WATER TEMPERATURES
DAILY MAXIMUM and MINIMUM
(IN DEGREES FAHRENHEIT)

WATER YEAR	STATION NO.	STATION NAME
1966	B 9 5620	San Joaquin River at Rindge Pump

DAY	OCT.		NOV.		DEC.		JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		DAY
	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	
1	70	67	68	66	56	54	44	44	47	46	61	60	66	62	69	66	72	70	81	77	83	78	75	71	1
2	70	68	68	65	54	52	44	44	48	47	59	57	66	63	70	67	71	69	80	76	84	78	78	72	2
3	69	68	68	65	52	51	45	45	48	48	59	57	65	63	71	68	74	69	80	75	84	79	78	73	3
4	69	68	68	67	52	52	45	45	48	48	58	58	63	62	70	67	73	69	81	76	85	79	78	74	4
5	68	67	67	67	52	52	45	45	48	48	57	56	67	63	70	67	74	70	80	76	85	79	79	75	5
6	70	68	68	66	52	51	45	44	50	49	60	57	65	63	71	68	71	70	80	75	84	80	77	75	6
7	73	68	67	66	51	50	47	45	50	49	61	60	65	63	71	67	73	68	80	75	84	80	76	74	7
8	72	70	66	66	50	49	51	46	50	49	61	60	66	63	71	68	74	69	79	74	84	81	77	72	8
9	71	70	66	64	49	49	51	50	50	49	60	59	64	63	70	68	75	69	78	73	84	81	77	74	9
10	70	69	67	65	49	48	51	50	51	50	61	59	64	63	69	67	75	71	78	72	83	81	76	74	10
11	71	69	65	65	48	47	51	50	51	49	62	59	64	63	70	67	76	72	77	73	81	79	74	72	11
12	71	69	65	65	48	47	50	49	52	50	60	59	65	63	71	67	76	72	76	72	80	77	73	71	12
13	71	69	65	63	48	47	50	50	50	48	62	59	66	63	72	69	76	72	75	72	79	77	72	69	13
14	71	70	64	62	48	46	50	50	50	49	61	59	67	64	70	68	80	75	75	72	81	76	72	69	14
15	70	67	62	62	47	46	50	49	51	50	62	60	69	64	71	68	80	77	76	72	82	77	73	69	15
16	68	63	62	62	48	46	50	48	53	52	62	61	69	66	72	68	80	78	76	72	83	77	74	69	16
17	66	60	62	62	47	45	49	48	52	52	61	59	69	67	71	69	82	78	76	72	83	78	77	72	17
18	66	63	63	63	47	45	48	47	52	52	61	60	66	65	74	71	84	79	77	73	83	78	74	72	18
19	65	64	63	62	45	44	47	47	54	52	61	60	65	64	75	72	84	80	78	74	82	78	73	70	19
20	65	63	62	62	44	43	47	45	54	54	61	60	66	64	77	73	84	80	79	74	82	77	73	71	20
21	65	64	62	62	44	43	46	45	56	54	59	58	66	64	77	73	80	77	80	75	80	76	74	70	21
22	65	64	63	62	43	42	45	45	57	56	60	58	66	63	76	73	78	75	80	75	79	75	74	72	22
23	66	64	63	62	41	40	45	45	61	57	62	57	68	63	76	73	77	75	82	76	77	75	73	72	23
24	66	65	62	61	40	40	45	45	61	59	62	59	69	65	76	74	77	74	82	77	76	74	74	72	24
25	68	66	61	60	42	41	46	45	60	59	64	60	69	66	76	74	79	74	83	77	76	74	73	71	25
26	68	67	61	59	42	42	45	45	59	57	64	59	69	66	77	74	79	75	83	77	74	73	74	72	26
27	68	67	59	57	42	42	45	45	62	59	63	60	66	63	77	75	82	77	80	77	76	72	74	72	27
28	67	66	57	56	42	42	45	44	61	60	64	59	66	64	77	74	81	78	80	78	78	74	76	72	28
29	68	67	56	55	43	42	45	44	-	-	63	60	66	65	75	74	81	78	81	78	75	71	77	74	29
30	69	66	57	55	43	43	45	44	-	-	65	61	68	65	75	73	81	77	80	78	72	70	76	74	30
31	69	66	-	-	44	43	46	45	-	-	65	61	-	-	74	72	-	-	81	77	72	70	-	-	31
AVG.	6	8	6	3	4	6	4	7	5	2	6	0	6	5	7	2	7	6	7	7	7	8	7	4	AVG.
MAX.	73		68		56		51		62		65		69		77		84		83		85		79		MAX.
MIN.		60		55		40		44		46		56		62		66		68		72		70		69	MIN.

YEARLY EXTREMES

MAXIMUM			MINIMUM		
TEMPERATURE	MO	DAY	TEMPERATURE	MO.	DAY
85	Aug.	4,5	40	Dec.	23,24

LOCATION			MAXIMUM TEMPERATURE OF RECORD		MINIMUM TEMPERATURE OF RECORD		PERIOD OF RECORD	
LATITUDE	LONGITUDE	1/4 SEC. T. & R. B. & M.		DATE		DATE	FROM	TO
37 59 51	121 25 06	NW 27 2N 5E	85	8-4,5-66	40	12-23,24-65	1-7-65	Present

Station located on Rindge Tract at Fourteen mile Slough near junction with Stockton Ship Channel, 8 mi. N.W. of Stockton

APPENDIX E

GROUND WATER QUALITY

INTRODUCTION

This appendix presents ground water quality data collected during the period from October 1, 1965, through September 30, 1966. The data were collected from a number of major ground water sources in Northeastern California in cooperation with other state, local, and federal agencies. During the 1966 water year, 232 wells were sampled in 15 ground water basins and subbasins or subareas.

At the time of field sampling, pH and temperature measurements are normally made. Comments on current conditions are noted in field books which are available in the files of the Department of Water Resources.

Laboratory analyses of ground waters were performed in accordance with "Standard Methods for the Examination of Water and Waste Water", 12th Edition, American Public Health Association, New York, N. Y.

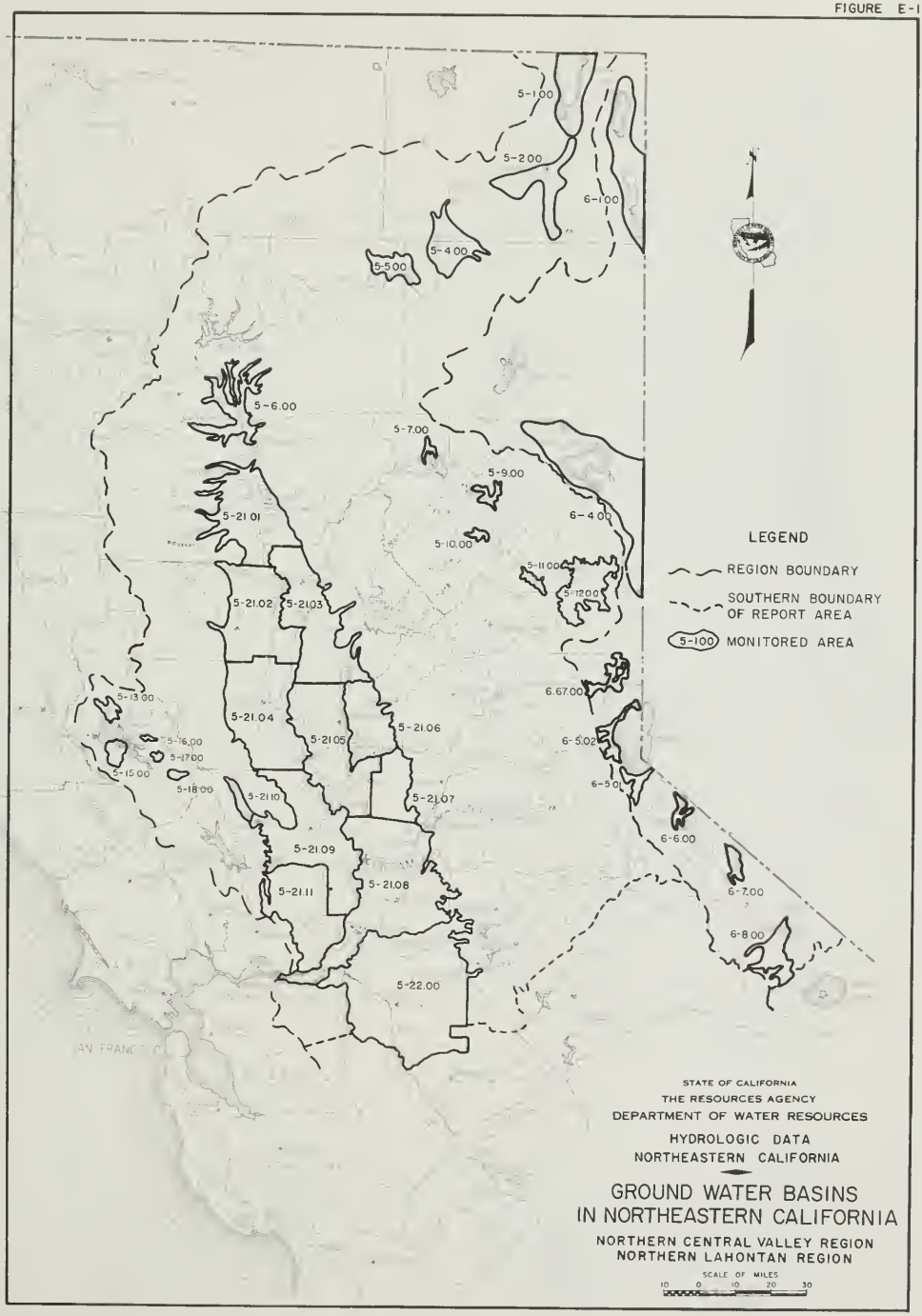
The Region and Basin and State Well Numbering Systems are described in Appendix C, "Ground Water Measurement".

INDEX OF MONITORED AREAS

CENTRAL VALLEY REGION (No. 5)

LAHONTAN REGION (NO. 6)

FIGURE E-1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5-2.00
6-1.00
5-4.00
5-5.00
5-6.00
5-7.00
5-9.00
6-4.00
5-10.00
5-11.00
5-12.00
5-21.01
5-21.02
5-21.03
5-13.00
5-21.04
5-21.05
5-21.06
5-16.00
5-17.00
5-15.00
5-18.00
5-21.10
5-21.07
5-21.09
5-21.11
5-21.08
5-22.00
6.67.00
6-5.02
6-5.01
6-6.00
6-7.00
6-8.00
LEGEND
REGION BOUNDARY
SOUTHERN BOUNDARY OF REPORT AREA
5-100 MONITORED AREA
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
HYDROLOGIC DATA
NORTHEASTERN CALIFORNIA
GROUND WATER BASINS IN NORTHEASTERN CALIFORNIA
NORTHERN CENTRAL VALLEY REGION
NORTHERN LAHONTAN REGION
SCALE OF MILES
10 0 10 20 30

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME / LAB / SAMPLER	TEMP	PH LAB	PH FLD	EC LAB	EC FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
GOOSE LAKE VALLEY	5-1.00																			
48N/14E-23K01 M 08/31/66		--	--	--	217		--	--	--	--	--	--	--	--	9.7 .16	--	--	--	--	--
48N/14E-35A01 M 08/31/66		--	--	--	189		--	--	--	--	--	--	--	--	19 .31	--	--	--	--	--
48N/14E-35A02 M 08/31/66		--	--	--	661		--	--	--	--	--	--	--	--	--	3.9	3.8	--	--	--
44N/14E-07K01 M 08/31/66 5050		--	8.6	366			38 1.90 48	14 1.15 29	21 .91 23	1.6 .04 1	12 .40 10	193 3.17 83	2.3 .05 1	4.4 .12 3	4.2 .07 2	--	0.0	--	201 192	151 0
45N/13E-12L01 M 08/31/66		--	--	--	305		--	--	--	--	--	--	--	--	--	--	--	--	--	--
45N/14E-32L01 M 08/31/66		--	--	--	236		--	--	--	--	--	--	--	--	--	--	--	--	--	--
46N/14E-32L01 M 08/31/66 5050		--	8.1	176			15 .75 42	6.2 .51 28	10 .44 24	4.1 .10 6	0.0	91 1.49 89	0.6 .01 1	5.7 .16 10	1.1 .02 1	--	0.0	--	153 87	63 0
47N/14E-02H01 M 08/31/66 5050		--	8.3	443			1.0 .05 1	0.1 .01	85 3.70 98	1.1 .03 1	0.0	129 2.12 54	36 .75 19	38 1.07 27	1.4 .02 1	--	2.2	--	303 228	3 0
47N/14E-14B02 M 08/31/66		--	--	--	159		--	--	--	--	--	--	--	--	--	--	--	--	--	--
48N/13E-20G01 M 08/31/66 5050		--	8.0	493			55 2.74 55	21 1.73 34	9.8 .43 9	4.8 .12 2	0.0	233 3.82 77	17 .35 7	6.8 .19 4	37 .60 12	--	0.1	--	309 266	225 34
ALTURAS BASIN	5-2.00																			
39N/13E-06N01 M 08/29/66		--	8.1	227			--	--	34 1.48	--	--	--	--	4.7 .13	--	--	--	--	--	48 48

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME	LAB / SAMPLER	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
ALTURAS BASIN	5-2.00																	
40N/12E-11E01 M 08/29/66		--	--	-- 164	--	--	--	--	--	--	--	--	--	--	--	--	--	--
40N/12E-25J01 M 08/29/66		--	--	-- 413	--	--	--	--	--	--	--	--	--	--	--	--	--	--
41N/11E-02J01 M 08/31/66	5060	--	--	-- 235	--	--	--	--	--	--	--	--	--	--	--	--	--	--
41N/12E-15H01 M 09/21/66		--	--	-- 220	--	--	--	--	--	--	--	--	--	--	--	--	--	--
41N/13E-18P01 M 08/29/66	5060	--	8.1	991	116 5.79	50 4.11	--	--	0.0	274 4.49	306 6.36	--	--	--	--	--	--	498 274
42N/11E-19E01 M 09/20/66		--	8.5	472	2.8 .14 3	0.0	99 4.31 92	8.5 .22 5	9.7 .32 7	220 3.61 76	31 .64 13	7.1 .20 4	0.2	--	0.1	--	334 266	7 0
42N/11E-24A01 M 08/28/66		--	--	-- 207	--	--	--	--	--	--	--	--	--	--	--	--	--	--
42N/13E-31G01 M 08/29/66		--	--	-- 553	--	--	--	--	--	--	--	--	--	--	--	--	--	--
42N/13E-32G01 M 08/29/66		--	--	-- 345	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIG VALLEY	5-4.00																	
37N/07E-02Q01 M 08/04/66	5060	60 F	7.8	197 242	12 .60 29	5.6 .46 22	20 .87 42	4.9 .13 6	0.0	120 1.97 96	0.0	2.4 .07 3	0.5 .01	--	0.0	--	154 104	53 0
37N/07E-13H01 M 08/04/66	5060	58 F	--	-- 211	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE TIME / LAB SAMPLER	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER				MILLIEQUIVALENT PER LITER PERCENT REACTANCE VALUE						MILLIGRAMS PER LITER				
				CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
BIG VALLEY	5-4.00																
38N/07E-02P01 M 08/04/66 5050	65 F	--	523 532	33 1.65	16 1.32	57 2.48	--	--	--	--	38 1.07	--	--	--	--	--	150 150
38N/07E-23Q01 M 08/04/66 5050	61 F	--	-- 280	--	--	--	--	--	--	--	--	--	--	--	--	--	--
38N/08E-17K01 M 08/04/66 5050	62 F	--	210 233	18 .90	9.7 .80	14 .61	--	--	--	--	2.8 .08	--	--	--	--	--	85 85
38N/08E-30R01 M 08/04/66 5050	59 F	--	635 630	40 2.00	--	26 1.13	--	--	--	--	48 1.35	--	--	--	--	--	--
38N/09E-21L01 M 08/04/66	--	--	-- 334	--	--	--	--	--	--	--	--	--	--	--	--	--	--
39N/07E-13Q01 M 08/04/66	--	--	-- 218	--	--	--	--	--	--	--	--	--	--	--	--	--	--
39N/07E-14R01 M 08/04/66 5050	58 F	--	-- 2504	--	--	--	--	--	--	--	--	--	--	--	--	--	--
39N/09E-28F01 M 08/04/66	--	--	-- 189	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FALL RIVER VALLEY	5-5.00																
37N/05E-01C01 M 08/03/66 5050	62 F	--	-- 204	--	--	--	--	--	--	--	--	--	--	--	--	--	--
37N/05E-14R01 M 08/03/66 5050	61 F	--	-- 196	--	--	--	--	--	--	--	--	--	--	--	--	--	--
37N/05E-24F01 M 08/03/66 5050	63 F	--	-- 199	--	--	--	--	--	--	--	--	--	--	--	--	--	--

MINERAL ANALYSIS OF GROUND WATER

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / LAB / TIME / SAMPLER		TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE										MILLIGRAMS PER LITER				
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
FALL RIVER VALLEY	5-5.00																	
37N/06E-19L01 M 08/03/66 SOSO		68 F	--	206 204	21 1.05	5.5 .45	10 .44	--	--	--	--	1.9 .05	--	--	--	--	--	75 75
37N/06E-29B01 M 08/03/66 SOSO		63 F	--	-- 298	--	--	--	--	--	--	--	--	--	--	--	--	--	--
38N/03E-24F01 M 08/03/66 SOSO		55 F	--	-- 151	--	--	--	--	--	--	--	--	--	--	--	--	--	--
REDDING BASIN	5-6.00																	
29N/04W-12P01 M 07/26/66		--	--	-- 198	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29N/04W-15E01 M 08/18/66 SOSO		62 F	8.2	216	19 .95 44	10 .82 38	9.2 .40 18	0.4 .01	0.0	116 1.90 89	3.8 .08 4	3.9 .11 5	2.5 .04 2	--	0.0	--	140 106	89 0
29N/04W-16P02 M 08/18/66 SOSO		63 F	7.8	413	28 1.40 34	21 1.73 43	21 .91 22	0.9 .02	0.0	145 2.38 61	17 .35 9	27 .76 20	24 .39 10	--	0.0	--	255 210	156 37
29N/04W-19A01 M 08/18/66 SOSO		61 F	7.9	177	13 .65 37	7.2 .59 33	12 .52 29	0.5 .01 1	0.0	98 1.61 93	0.5 .01 1	2.5 .07 4	3.3 .05 3	--	0.0	--	141 87	62 0
29N/05W-07A02 M 08/18/66 SOSO		62 F	8.3	362	21 1.05 28	27 2.22 60	10 .44 12	0.6 .02 1	0.0	168 2.76 77	12 .25 7	5.9 .17 5	24 .39 11	--	0.0	--	248 183	164 76
29N/05W-09A01 M 08/18/66 SOSO		72 F	8.0	154	9.8 .49 31	7.5 .62 39	11 .48 30	0.3 .01 1	0.0	89 1.46 88	2.3 .05 3	3.0 .08 5	4.1 .07 4	--	0.1	--	137 82	56 0
30N/03W-14M01 M 08/24/66		64 F	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME	LAB / SAMPLER	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
REDDING BASIN	5-6.00																	
30N/03W-04M01 M 08/26/66	5050	--	7.5	187	-- --	-- --	-- --	-- --	0.0	105 1.72	--	2.6 .07	--	--	--	--	--	78 0
30N/03W-21A01 M 08/29/66	5050	71 F	8.6	309	21 1.05 32	19 1.56 47	15 .64 20	2.2 .06 2	11 .37 10	182 2.98 84	1.6 .03 1	4.0 .11 3	2.2 .04 1	--	0.1	--	155 165	132 0
30N/03W-29K01 M 08/29/66	5050	67 F	8.0	149	8.8 .44 29	8.5 .70 46	8.0 .35 23	1.1 .03 2	0.0	78 1.28 87	1.5 .03 2	2.9 .08 5	4.7 .08 5	--	0.1	--	138 74	57 0
30N/03W-34D01 M 07/26/66	5050	66 F	7.3	305 310	24 1.20	18 1.52	11 .48	--	0.0	162 2.66	--	3.7 .10	--	--	--	--	--	136 3
30N/04W-01E01 M 07/26/66		--	--	-- 156	--	--	--	--	--	--	--	--	--	--	--	--	--	--
30N/04W-02E01 M 08/19/66	5050	73 F	8.0	135	6.1 .30 22	6.8 .56 41	11 .48 36	0.4 .01 1	0.0	66 1.08 86	0.0	2.8 .08 6	6.4 .10 8	--	0.0	--	114 66	43 0
30N/04W-14G03 M 08/19/66	5050	65 F	7.6	142	--	--	--	--	0.0	71 1.16	--	3.1 .09	--	--	--	--	--	55 0
30N/04W-14G03 M 08/19/66	5050	63 F	8.0	140	10 .50 37	5.6 .46 34	8.2 .36 27	1.0 .03 2	0.0	68 1.12 89	2.8 .06 5	1.7 .05 4	2.0 .03 2	--	0.0	--	122 65	48 0
30N/04W-16J01 M 07/26/66	5050	66 F	--	-- 269	18 .90	--	13 .57	--	--	--	--	6.3 .18	--	--	--	--	--	--
30N/05W-15R01 M 07/26/66		--	--	-- 155	--	--	--	--	--	--	--	--	--	--	--	--	--	--
30N/05W-17R01 M 07/26/66		--	--	-- 147	--	--	--	--	--	--	--	--	--	--	--	--	--	--
30N/05W-17R01 M 08/22/66	5050	--	7.3	140	--	--	--	--	0.0	77 1.26	--	4.7 .13	--	--	--	--	--	37 0

MINERAL ANALYSIS OF GROUND WATER

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME / LAB / SAMPLER	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER TDS SUM	TH NCH
REDDING BASIN 5-6.00																	
31N/03W-09G01 M 08/26/66 5050	65 F	7.7	227	28 1.40 63	1.4 .12 5	11 .48 22	8.6 .22 10	0.0	108 1.77 83	1.3 .03 1	9.0 .25 12	5.3 .09 4	--	0.1	--	157 118	76 0
31N/03W-12E01 M 07/26/66	--	--	-- 184	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31N/03W-20M03 M 08/26/66 5050	66 F	8.3	217	16 .80 38	11 .90 42	8.8 .38 18	1.8 .05 2	0.0	113 1.85 83	5.1 .11 5	4.7 .13 6	8.4 .14 6	--	0.1	--	195 111	85 0
31N/04W-07A01 M 07/27/66 5050	88 F	--	-- 205	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31N/04W-16Q01 M 07/26/66	--	--	-- 170	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31N/05W-25K01 M 07/26/66 5050	66 F	7.3	261 271	9.5 .47	6.2 .51	44 1.91	--	0.0	118 1.94	--	26 .73	--	--	--	--	--	69 0
32N/03W-17E02 M 07/26/66 5050	73 F	8.0	4020 3662	41 2.05 6	5.8 .48 1	794 34.54 93	3.9 .10	0.0	162 2.66 7	170 3.54 10	1090 30.74 83	2.4 .04	--	18.0	--	2060 2204	126 0
32N/03W-20P01 M 07/26/66 5050	76 F	7.0	274 372	27 1.35 49	5.7 .47 17	21 .91 33	1.5 .04 1	0.0	129 2.12 74	17 .35 12	14 .39 14	0.0	--	0.4	--	162 150	91 0
32N/03W-32J02 M 07/26/66	--	--	-- 442	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32N/03W-35C01 M 07/26/66	--	--	-- 212	--	--	--	--	--	--	--	--	--	--	--	--	--	--
32N/03W-35C01 M 08/26/66 5050	--	7.7	208	--	--	--	--	0.0	122 2.00	--	3.9 .11	--	--	--	--	--	72 0
32N/04W-14F02 M 07/26/66 5050	64 F	--	-- 202	12 .60	--	21 .91	--	--	--	--	10 .28	--	--	--	--	--	--

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME	LAB / SAMPLER	TEMP	PH LAB	PH FLD	EC LAB	EC FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER TDS SUM	TH NCH
REDDING BASIN	5-6.00																				
32N/04W-16B02 M 07/26/66	5050	76 F	--		127 140			--	--	--	--	--	--	--	--	--	--	0.3	--	--	--
32N/04W-34P01 M 07/27/66	5050	70 F	7.6		168 186			10 .50 28	9.2 .76 43	11 .48 27	1.2 .03 2	0.0	95 1.56 90	0.0	4.0 .11 6	3.6 .06 3	--	0.0	--	104 86	63 0
32N/05W-26M01 M 07/26/66		--	--		-- 251			--	--	--	--	--	--	--	--	--	--	--	--	--	--
LAKE ALMANOR VALLEY	5 7.00																				
28N/07E-05L01 M 06/28/66		--	7.7		82			--	--	5.4 .23	--	0.0	42 .69	--	1.5 .04	--	--	--	--	--	29 0
28N/07E-05N01 M 06/28/66		--	8.0		92			--	--	5.5 .24	--	0.0	51 .84	--	1.7 .05	--	--	--	--	--	30 0
28N/07E-07A01 M 06/28/66		--	8.2		110			--	--	7.1 .31	--	0.0	65 1.07	--	1.4 .04	--	--	--	--	--	39 0
28N/07E-07H01 M 06/28/66		--	8.3		134			--	--	4.8 .21	--	0.0	70 1.15	--	4.3 .12	--	--	--	--	--	61 4
28N/07E-18B01 M 06/28/66		--	7.6		328			--	--	5.4 .23	--	0.0	208 3.41 1	--	1.8 .05	--	--	--	--	--	156 0
28N/07E-18D01 M 06/28/66		--	7.5		75			--	--	2.7 .12	--	0.0	45 .74	--	1.7 .02	--	--	--	--	--	34 0
28N/07E-18M01 M 06/28/66		--	7.3		55			--	--	2.5 .11	--	0.0	31 .51	--	0.8 .02	--	--	--	--	--	19 0
INDIAN VALLEY	5 9.00																				
[illegible]		[illegible]			[illegible]			--	--	[illegible]	--	4.0	139	--	1.4	--	--	--	--	--	110

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME / LAB / SAMPLER	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER				MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER				TDS SUM	TH NCH
				CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2			
INDIAN VALLEY	5 9.00																	
26N/10E-04E01 M 06/27/66	--	8.4	186	--	--	21 .91	--	2.0 .07	115 1.89 1	--	1.3 .04	--	--	--	--	--	55 0	
26N/10E-08E01 M 06/27/66	--	8.4	448	--	--	57 2.48	--	3.0 .10	118 1.94	--	70 1.97	--	--	--	--	--	98 0	
26N/10E-19P01 M 06/27/66	--	8.2	519	--	--	47 2.04	--	0.0	211 3.46	--	33 .93	--	--	--	--	--	160 0	
26N/10E-23A01 M 06/27/66	--	7.4	145	--	--	4.9 .21	--	0.0	111 1.82	--	1.2 .03	--	--	--	--	--	90 0	
26N/10E-27H01 M 06/27/66	--	7.5	103	--	--	4.7 .21	--	0.0	56 .92	--	1.3 .04	--	--	--	--	--	40 0	
AMERICAN VALLEY	5 10.00																	
24N/09E-02A 1 S 06/26/66	--	8.3	173	--	--	27 1.17	--	0.0	116 1.90	--	1.4 .10	--	--	--	--	--	48 0	
24N/09E-10H01 M 06/26/66	--	8.3	149	--	--	2.5 .11	--	0.0	89 1.46	--	1.0 .03	--	--	--	--	--	74 1	
24N/10E-06N01 M 06/26/66	--	8.2	425	--	--	24 1.04	--	0.0	256 4.20	--	4.3 .12	--	--	--	--	--	172 0	
24N/10E-08L01 M 06/26/66	--	7.8	274	--	--	8.7 .38	--	0.0	174 2.85 1	--	1.9 .05	--	--	--	--	--	132 0	
24N/10E-14C01 M 06/26/66	--	8.0	103	--	--	2.6 .11	--	0.0	53 .87	--	1.2 .03	--	--	--	--	--	47 4	
24N/10E-14R01 M 06/26/66	--	8.1	106	--	--	2.1 .09	--	0.0	54 .89	--	1.0 .03	--	--	--	--	--	49 2	

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / LAB / TIME / SAMPLER	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
AMERICAN VALLEY	5 10.00																
24N/10E-19D01 M	--	8.2	123	--	--	3.4	--	0.0	69	--	1.0	--	--	--	--	--	50
06/26/66						.15			1.13		.03						0
24N/10E-20D01 M	--	7.5	50	--	--	2.5	--	0.0	22	--	2.0	--	--	--	--	--	22
06/26/66						.11			.36		.06						4
MOHAWK VALLEY	5 11.00																
22N/12E-09Q01 M	--	8.3	274	--	--	15	--	0.0	116	--	1.3	--	--	--	--	--	104
06/24/66						.65			1.90		.04						9
22N/13E-19N01 M	--	8.5	246	--	--	20	--	4.0	135	--	1.8	--	--	--	--	--	88
06/24/66						.87		.13	2.21		.05						0
22N/13E-30R01 M	--	7.7	393	--	--	49	--	0.0	106	--	21	--	--	--	--	--	80
06/24/66						2.13			1.74		.59						0
SIERRA VALLEY	5 12.00																
23N/14E-25Q02 M	--	8.4	430	--	--	21	--	9.0	154	--	10	--	--	--	--	--	171
06/25/66						.91		.30	2.53		.28						30
23N/14E-35L02 M	--	8.2	819	--	--	139	--	0.0	97	--	125	--	--	--	--	--	68
06/25/66						6.05			1.59		3.53						0
23N/15E-28H04 M	--	7.9	317	--	--	12	--	0.0	195	--	2.4	--	--	--	--	--	132
06/25/66						.52			3.20 1		.07						0
23N/15E-35C01 M	--	8.2	144	--	--	4.1	--	0.0	84	--	1.2	--	--	--	--	--	61
06/25/66						.18			1.38 1		.03						0
22N/15E-11F01 M	--	8.5	586	--	--	118	--	13	225	--	35	--	--	--	--	--	36
06/25/66						5.13		.43	3.69		.99						0

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME	LAB / SAMPLER	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
SIERRA VALLEY		5 12.00																	
22N/15E-12H01 M		--	7.9	188	--	--	25	--	0.0	95	--	4.9	--	--	--	--	--	--	21
06/25/66							1.09			.74		.11							0
22N/15E-17C03 M		--	7.4	412	--	--	76	--	0.0	179	--	27	--	--	--	--	--	--	28
06/25/66							3.31			2.94		.76							0
22N/15E-26K02 M		--	8.4	2170	--	--	340	--	71	458	--	222	--	--	--	--	--	--	435
06/24/66							15.05		2.36	7.51		6.26							0
22N/16E-05N02 M		--	8.6	201	--	--	27	--	19	90	--	2.1	--	--	--	--	--	--	23
06/24/66							1.17		.63	1.48		.06							0
22N/16E-19E01 M		--	8.3	228	--	--	22	--	0.0	128	--	4.8	--	--	--	--	--	--	64
06/24/66							.96			2.10		.25							0
21N/14E-15J01 M		--	8.5	456	--	--	75	--	3.0	119	--	47	--	--	--	--	--	--	54
06/25/66							3.25		.10	1.95		1.33							0
21N/14E-29J01 M		--	8.5	230	--	--	8.4	--	2.0	143	--	1.3	--	--	--	--	--	--	104
06/25/66							.37		.07	2.35		.04							0
										1									
21N/14E-36K01 M		--	7.6	202	--	--	11	--	0.0	122	--	2.2	--	--	--	--	--	--	81
06/24/66							.48			2.00		.06							0
21N/15E-05D01 M		--	7.4	1480	--	--	285	--	0.0	167	--	265	--	--	--	--	--	--	64
06/24/66							12.44			2.74		7.56							0
21N/15E-09Q03 M		--	8.3	234	--	--	27	--	0.0	124	--	1.7	--	--	--	--	--	--	53
06/24/66							1.17			2.03		.05							0
20N/14E-04G02 M		--	8.6	243	--	--	10	--	3.0	147	--	1.3	--	--	--	--	--	--	108
06/25/66							.44		.10	2.41		.04							0

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME	LAB / SAMPLER	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
TEHAMA COUNTY	5-21.01																		
23N/02W-05A01 M 08/15/66		--	--	-- 344		--	--	--	--	--	--	--	--	--	--	--	--	--	--
23N/03W-22Q01 M 08/15/66 5050		70 F	7.8	292		23 1.15 38	12 1.05 35	19 .83 27	--	0.0	144 2.36 79	7.9 .16 5	16 .45 15	--	--	--	--	-- 149	110 0
23N/03W-35H01 M 08/15/66		--	--	-- 214		--	--	--	--	--	--	--	--	--	--	--	--	--	--
24N/02W-30C01 M 08/15/66		--	--	-- 432		--	--	--	--	--	--	--	--	--	--	--	--	--	--
24N/03W-03P01 M 08/15/66 5150		66 F	7.2	336		37 1.85 53	14 1.19 34	9.4 .43 12	--	0.0	163 2.67 80	22 .46 14	7.9 .22 7	--	--	--	--	-- 171	152 19
24N/03W-04R01 M 08/15/66		--	--	-- 348		--	--	--	--	--	--	--	--	--	--	--	--	--	--
24N/03W-14M01 M 08/15/66		--	--	-- 276		--	--	--	--	--	--	--	--	--	--	--	--	--	--
24N/03W-20N01 M 08/15/66		--	--	-- 180		--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME	LAB / SAMPLER	TEMP	PH LAB	PH FLD	EC LAB	EC FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
TEHAMA COUNTY	5-21.01																				
24N/05W-21L01 M		68 F	7.6		416			26	11	42	--	0.0	184	7.2	36	--	--	--	--	--	111
08/15/66	5050							1.30	.92	1.83			3.02	.15	1.02					213	0
								32	23	45			72	4	24						
25N/02W-04M01 M		--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/16/66						282															
25N/02W-07K01 M		--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/16/66						549															
25N/03W-03N01 M		--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/16/66						390															
25N/03W-31R01 M		76 F	8.0		507			56	23	12	0.7	0.0	217	36	17	30	--	0.1	--	284	235
08/15/66	5050							2.79	1.89	.52	.02		3.56	.75	.48	.48				281	57
								53	36	10			68	14	9	9					
26N/03W-03N01 M		74 F	7.5		331			30	18	14	0.8	0.0	171	13	4.1	8.6	--	0.1	--	188	147
08/16/66	5050							1.50	1.48	.61	.02		2.80	.27	.26	.14				177	7
								42	41	17	1		81	8	7	4					
26N/03W-22G01 M		--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/16/66						241															
26N/04W-10D01 M		--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/16/66						371															
27N/03W-10Q01 M		--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/16/66						293															
27N/03W-15C01 M		68 F	7.4		293			27	14	12	1.7	0.0	142	8.6	9.9	14	--	0.1	--	194	124
08/16/66	5050							1.35	1.15	.52	.04		2.33	.18	.28	.23				157	8
								44	38	17	1		77	6	9	8					
27N/03W-19A01 M		--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/16/66						236															
27N/04W-01H02 M		--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/16/66						240															

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME / SAMPLER	TEMP	PH LAB	PH FLD	EC LAB	EC FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER TDS SUM	TH NCH
GLENN COUNTY	5-21.02																		
18N/02W-07F01 M 07/11/66 5050	--		7.9	713		37 1.85 24	37 3.04 39	67 2.91 37	1.6 .04 1	0.0	327 5.36 70	93 1.93 25	10 .28 4	6.8 .11 1	--	0.2	--	421 413	246 0
18N/03W-10K01 M 07/11/66	--		--	--	509	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18N/04W-02F01 M 07/11/66 5050	--		7.7	986		46 2.30 24	41 3.37 35	92 4.00 41	0.7 .02	0.0	324 5.31 54	25 .52 5	112 3.16 32	49 .79 8	--	0.1	--	568 525	284 19
19N/02W-06G01 M 07/08/66	--		--	--	325	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19N/02W-23N01 M 07/11/66 5050	--		8.0	818		62 3.09 35	50 4.11 46	37 1.61 18	1.1 .03	0.0	484 7.94 89	36 .75 8	8.2 .23 3	3.1 .05 1	--	0.2	--	470 435	361 0
19N/03W-09J01 M 07/11/66 5050	--		7.9	503		25 1.25 23	27 2.22 41	45 1.96 36	1.0 .03 1	0.0	265 4.35 82	30 .62 12	7.5 .21 4	6.4 .10 2	--	0.1	--	280 272	173 0
19N/03W-18P01 M 07/11/66	--		--	--	591	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20N/02W-11Q01 M 07/08/66	--		--	--	400	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20N/02W-13Q01 M 07/08/66	--		--	--	445	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20N/03W-02D01 M 07/07/66	--		--	--	438	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20N/04W-02Q01 M 07/07/66 5050	--		8.0	358		31 1.55 42	18 1.48 40	15 .65 18	0.8 .02 1	0.0	186 3.05 83	7.2 .15 4	6.0 .17 5	19 .31 8	--	0.1	--	209 188	153 1
21N/02W-02D01 M 07/07/66	--		--	--	411	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME	LAB / SAMPLER	TEMP	PH LAB	PH FLD	EC LAB	EC FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
GLENN COUNTY	5-21.02																				
21N/02W-15C01 M		--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/08/66						410															
21N/03W-02N01 M		--	8.0		533			50	25	22	0.9	0.0	240	16	27	22	--	0.2	--	307	228
07/07/66	5050							2.50	2.06	.96	.02		3.94	.33	.76	.35				281	31
								43	37	17			73	6	14	7					
21N/03W-14F01 M		--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/07/66						353															
21N/03W-20D01 M		--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/07/66						342															
22N/01W-29C01 M		--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/07/66						460															
22N/02W-03A01 M		--	8.3		601			51	26	24	0.8	0.0	169	42	39	57	--	0.2	--	346	234
07/06/66	5050							2.54	2.14	1.22	.02		2.77	.87	1.10	.92				327	96
								43	36	21			49	15	19	16					
22N/02W-26H01 M		--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/07/66						401															
22N/03W-04G01 M		--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/06/66						473															
22N/03W-22D01 M		--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/06/66	5060					411															
22N/03W-25H01 M		--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/07/66						399															
22N/04W-10J01 M		--	--		--			--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/06/66						505															

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME	LAB / SAMPLER	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
COLUSA COUNTY	5-21.04																	
13N/01W-20H02 M		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/27/66				423														
13N/01W-36Q02 M		--	8.0	463	27	18	40	1.1	0.0	199	7.4	37	3.2	--	0.1	--	254	143
09/27/66	5050				1.35	1.48	1.74	.03		3.26	.15	1.04	.05				231	0
					29	32	38	1		72	3	23	1					
13N/02W-13B01 M		--	7.0	902	62	46	44	1.4	0.0	318	12	112	18	--	0.3	--	492	345
09/27/66	5050				3.09	3.78	2.13	.04		5.22	.25	3.16	.29				457	84
					34	42	24			59	3	35	3					
13N/02W-15D01 M		--	7.1	645	23	18	77	0.6	0.0	206	0.3	80	13	--	1.3	--	346	133
09/27/66	5050				1.15	1.48	3.35	.02		3.38	.01	2.26	.21				314	0
					19	25	56			58		39	4					
13N/02W-24L01 M		--	7.0	678	47	35	35	1.6	0.0	278	4.4	60	19	--	0.2	--	377	260
09/27/66	5050				2.35	2.88	1.52	.04		4.56	.09	1.69	.31				338	32
					35	42	22	1		69	1	25	5					
13N/02W-29R01 M		--	7.7	1150	40	41	124	1.4	0.0	228	30	219	1.9	--	2.2	--	639	271
09/27/66	5050				2.00	3.37	5.39	.04		3.74	.62	6.18	.03				571	84
					19	31	50			35	6	58						
14N/01W-02D01 M		--	8.3	1585	64	59	171	0.0	0.0	287	154	263	1.2	--	0.2	--	887	403
09/27/66	5050				3.19	4.85	7.44			4.71	3.20	7.42	.02				853	168
					21	31	48			31	21	48						
16N/01W-29J01 M		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/27/66				390														
16N/02W-04H01 M		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/27/66				611														
16N/02W-25B02 M		--	8.2	747	17	10	130	0.1	0.0	341	80	21	0.5	--	0.2	--	445	85
09/27/66	5050				.85	.82	5.66			5.59	1.66	.59	.01				426	0
					12	11	77			71	21	8						
17N/01W-06R01 M		--	8.0	347	26	12	23	1.7	0.0	198	2.1	8.6	0.0	--	0.1	--	179	115
09/27/66	5050				1.30	.99	1.26	.04		3.25	.04	.24					177	0
					36	28	35	1		92	1	7						
18N/02W-01E01 M		--	7.4	858	58	40	64	4.3	0.0	463	46	27	3.7	--	0.2	--	486	311
08/11/66	5050				2.89	3.29	2.96	.11		7.59	.96	.76	.06				474	0
					31	36	32	1		81	10	8	1					

TABLE E 1

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME	LAB / SAMPLER	TEMP	PH LAB / PH FLD	EC LAB / EC FLD	MINERAL CONSTITUENTS IN MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
COLUSA COUNTY	5-21.04																	
13N/02W-22G01 M		--	8.5	894	--	--	62	--	--	--	9.5	144	--	--	0.6	--	--	336
09/27/66							2.70				.20	4.06						336
14N/01W-12A01 M		--	8.7	610	--	--	114	--	13	247	4.8	53	--	--	--	--	--	--
09/27/66							4.96		.43	4.05	.10	1.49						
15N/02W-32R01 M		--	8.5	728	--	--	62	--	11	316	43	34	--	--	--	--	--	260
09/27/66							2.70		.37	5.18	.89	.96						0
15N/04W-25P01 M		--	8.0	1040	--	--	139	--	--	--	96	101	--	--	0.4	--	--	253
09/27/66							6.05				2.00	2.85						253
16N/02W-35H01 M		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/27/66				684														
16N/03W-09N01 M		--	8.2	625	--	--	60	--	--	--	--	63	--	--	--	--	--	206
09/27/66							2.61					1.78						206
17N/02W-12C01 M		--	8.3	481	--	--	--	--	0.0	262	--	--	--	--	--	--	--	192
09/27/66										4.30								0
SUTTER COUNTY	5 21.05																	
16N/03E-04F01 M		--	8.3	274	--	--	14	--	0.0	124	--	1.4	--	--	--	--	--	113
06/09/66							.61			2.12		.04						7
15N/01E-16R01 M		--	8.4	542	--	--	25	--	31	242	--	24	--	--	--	--	--	293
06/09/66							1.09		1.03	4.79		.68						2

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER DATE LAB TIME SAMPLER	TEMP	PH LAB PH FLD	EC LAB EC FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER MILLIEQUIVALENT PER LITER PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER TDS SUM	TH NCH
SUTTER COUNTY	5 21.05																
15N/01E-35R M 06/13/66	--	8.6	669	--	--	15 .65	--	18 .60	311 5.10	--	45 1.27	--	--	--	--	--	328 43
15N/02E-26D02 M 06/09/66	--	8.7	564	--	--	54 2.35	--	31 1.03	292 4.79	--	5.5 .16	--	--	--	--	--	195 0
15N/03E-04C M 06/09/66	--	8.7	983	--	--	29 1.25	--	17 .57	287 4.71	--	26 .73	--	--	--	--	--	348 84
15N/03E-23C01 M 06/17/66	--	8.3	175	--	--	5.9 .26	--	0.0	102 1.67	--	2.6 .07	--	--	--	--	--	81 0
14N/01E-01A01 M 06/13/66	--	8.3	628	--	--	27 1.17	--	0.0	363 5.95	--	15 .42	--	--	--	--	--	281 0
14N/01E-24N01 M 06/13/66	--	8.9	577	--	--	42 1.83	--	28 .93	273 4.48	--	9.0 .25	--	--	--	--	--	228 0
14N/03E-03C02 M 06/10/66	--	8.6	884	--	--	59 2.57	--	13 .43	209 3.43	--	128 3.61	--	--	--	--	--	316 123
14N/03E-05A03 M 06/10/66	--	8.7	842	--	--	60 2.61	--	13 .43	225 3.69	--	91 2.57	--	--	--	--	--	333 127
14N/03E-14E02 M 06/10/66	--	8.5	290	--	--	7.3 .32	--	9.0 .30	154 2.53	--	2.5 .07	--	--	--	--	--	139 0
14N/03E-15R01 M 06/10/66	--	8.7	939	--	--	54 2.52	--	26 .87	283 4.64	--	96 2.71	--	--	--	--	--	375 100
14N/03E-16B02 M 06/10/66	--	8.6	1300	--	--	54 2.74	--	4.0 .13	147 2.41	--	276 7.78	--	--	--	--	--	480 353
13N/03E-10M02 M 05/19/66 5000	--	8.4	836	--	--	44 1.87	--	13 .43	384 6.30	--	66 1.86	--	--	--	--	--	310 0

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME	LAB / SAMPLER	TEMP	PH LAB	PH FLD	EC LAB	EC FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
SUTTER COUNTY		5 21.05																			
14N/03E-28R01 M			--	8.3	1460			--	--	64	--	0.0	397	--	400	--	--	--	--	--	515
05/19/66	5000									2.78			6.51		8.45						190
12N/02E-09B02 M			--	8.8	667			--	--	121	--	16	239	--	66	--	--	--	--	--	77
06/13/66										5.26		.53	3.92		1.86						0
12N/02E-11N01 M			--	8.8	1330			--	--	220	--	22	227	--	283	--	--	--	--	--	119
06/13/66										9.83		.73	3.72		7.98						0
12N/02E-14B01 M			--	8.5	4460			--	--	572	--	9.0	179	--	1320	--	--	--	--	--	800
06/13/66										24.88		.30	2.94		37.22						639
12N/02E-16R01 M			--	9.0	1050			--	--	183	--	35	375	--	119	--	--	--	--	--	143
06/13/66										7.96		1.17	6.15		3.36						0
12N/02E-23Q01 M			--	8.7	982			--	--	174	--	22	230	--	177	--	--	--	--	--	103
06/13/66										7.73		.73	3.77		4.99						0
12N/02E-26A01 M			--	8.6	1120			--	--	191	--	18	253	--	210	--	--	--	--	--	105
06/13/66										8.31		.60	4.15		5.92						0
12N/03E-26R01 M			--	8.5	886			--	--	72	--	18	174	--	164	--	--	--	--	--	253
06/17/66										3.13		.60	2.85		4.62						81
11N/03E-24D01 M			--	8.8	503			--	--	54	--	24	257	--	10	--	--	--	--	--	135
06/19/66										2.35		.80	4.21		.28						0
11N/04E-09D01 M			--	8.3	395			--	--	16	--	0.0	210	--	16	--	--	--	--	--	148
05/17/66	5000									.70			3.44		.45						0
11N/04E-23P01 M			--	8.2	305			--	--	24	--	0.0	150	--	19	--	--	--	--	--	95
05/17/66	5000									1.04			2.46		.54						0
11N/04E-25P01 M			--	8.3	345			--	--	24	--	0.0	166	--	18	--	--	--	--	--	107
05/17/66	5000									1.04			2.72		.51						0

1145

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER DATE TIME	LAB SAMPLER	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER MILLIEQUIVALENT PER LITER PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER TDS SUM	TH NCH
SUTTER COUNTY	5 21.05																	
11N/04E-35J01 M		--	8.3	242	--	--	30	--	0.0	142	--	21	--	--	--	--	--	79
05/17/66 5000							1.31			2.33		.59						0
1140																		
10N/04E-01D01 M		--	8.5	327	--	--	33	--	12	138	--	24	--	--	--	--	--	88
05/17/66 5000							1.44		.40	2.26		.68						0
1115																		
SACRAMENTO COUNTY	5 21.08																	
09N/05E-27N		--	7.9	210	15	11	9.8	1.7	0.0	111	0.8	12	1.6	--	0.0	--	166	83
03/23/66 5000					.75	.90	.43	.04		1.82	.02	.34	.03				106	0
1200					43	42	20	2		82	1	15	1					
YOLO COUNTY	5 21.09																	
11N/02E-14F11		--	8.6	1330	86	2.3	85	2.4	28	438	100	157	3.6	--	1.4	--	877	559
03/15/66 5000					4.29	.19	3.70	.06	.93	7.18	2.08	4.43	.06				680	154
1200					52	2	45	1	8	59	14	30						
10N/01W-27C 1		--	8.3	649	47	35	47	2.6	0.0	297	28	58	6.2	--	1.9	--	381	261
03/15/66 5000					2.35	2.88	2.04	.07		4.87	.58	1.64	.10				371	18
1040					32	39	28	1		68	8	23	1					
08N/04E-20K11 M		--	8.4	447	17	27	44	2.6	4.0	230	31	20	2.7	--	0.7	--	296	154
03/15/66 5000					.85	2.22	1.91	.07	.13	3.77	.64	.56	.04				262	0
1015					17	44	34	1	3	73	12	11	1					
SAN JOAQUIN VALLEY	5 22.00																	
SAN JOAQUIN COUNTY	5 22.01																	
05N/04E-36J11		--	8.3	1160	34	22	172	2.4	5.0	301	3.8	214	1.3	--	1.1	--	631	186
05/25/66 5000					1.45	1.81	7.44	.06	.17	4.94	.07	6.03	.02				608	0
1440					17	15	68	1	2	44	1	54						
04N/05E-04F11 M		--	8.3	1140	69	40	100	1.6	0.0	235	0.0	259	1.0	--	0.5	--	770	330
05/25/66 5000					3.24	3.29	4.35	.04		3.85		7.30	.02				583	138
1400					30	30	40			34		65						
04N/05E-08H11		--	8.2	5440	310	213	455	3.0	0.0	344	0.0	1020	0.8	--	0.8	--	4190	1650
05/25/66 5000					15.47	17.51	19.79	.08		6.30		43.68	.01				2791	1336
1400					24	33	37			12		88						

MINERAL ANALYSIS OF GROUND WATER

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME	LAB / SAMPLER	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER				MILLIEQUIVALENT PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER			TDS SUM	TH NCH
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2		
SAN JOAQUIN COUNTY		5 22.01																
04N/05E-11N01 M		--	8.3	302	26	10	25	1.1	0.0	140	1.0	5.4	3.0	--	0.1	--	192	108
05/25/66	5000				1.30	.82	1.13	.03		2.95	.04	.15	.05				163	0
1300					40	25	34	1		91	1	6	2					
04N/05E-17M02 M		--	8.2	584	23	17	84	1.5	0.0	230	0.5	101	1.4	--	0.2	--	382	143
05/25/66	5000				1.65	1.40	3.65	.04		3.77	.01	2.85	.02				347	0
1330					22	21	58	1		57		43						
04N/05E-26P03 M		--	8.4	983	59	29	106	1.2	5.0	452	23	42	40	--	0.1	--	630	266
05/25/66	5000				2.94	2.38	4.61	.03	.20	7.41	.48	1.18	.64				528	0
1200					30	24	48		2	75	5	12	6					
04N/05E-29G01 M		--	8.2	685	53	23	47	0.7	0.0	211	6.0	109	1.4	--	0.1	--	453	227
05/25/66	5000				2.64	1.89	2.04	.02		3.46	.14	3.07	.02				344	54
1130					40	29	31			52	2	46						
01N/06E-16H		--	8.0	4780	192	70	441	5.5	0.0	125	0.0	1130	0.0	--	0.5	--	2270	767
10/08/65	5000				9.58	5.75	18.79	.17		2.05		31.87					1891	665
1430					28	17	55			5		94						
01N/06E-16H		--	8.3	2540	104	62	370	3.4	0.0	142	10.0	1021	0.2	--	0.4	--	2410	738
10/08/65	5000				4.64	5.10	16.36	.14		2.33		28.79					1729	622
1445					31	16	52			7		93						
01S/04E-13J		--	8.6	970	48	34	105	2.8	28	573	20	18	1.4	--	0.2	--	547	345
10/04/65	5000				2.40	4.44	4.70	.07	0.93	9.40	.58	.51	.03				570	0
1045					21	33	40	1	8	82	5	4						
01S/05E-27H		--	8.3	650	54	28	47	2.0	0.0	256	15	75	0.9	--	0.0	--	368	249
10/04/65	5000				2.69	2.30	1.74	.05		4.20	.31	2.12	.01				340	39
1130					40	34	25	1		83	5	32						
01S/06E-09F01 M		--	8.4	458	12	2.2	127	1.2	4.0	209	35	75	0.0	--	0.1	--	392	39
10/04/65	5000				.60	.18	5.52	.03	.13	3.43	.73	2.14					360	0
1300					9	3	87		2	53	11	33						
01S/06E-11C01 M		--	8.0	4020	303	54	342	4.5	0.0	80	0.0	1180	1.1	--	0.3	--	2480	994
12/07/65	5000				15.12	4.77	14.88	.24		1.41		33.24	.02				1933	929
1400					43	14	43	1		4		96						
01S/06E-12M01 M		--	8.5	758	57	15	88	5.0	14	323	30	34	35	--	0.2	--	470	205
10/04/65	5000				2.84	1.23	3.83	.13	.47	5.30	.62	1.07	.56				441	0
1400					35	15	48	2	6	85	7	13	7					
02S/04E-36R01		--	8.3	1210	74	15	154	4.3	0.0	170	23	122	7.1	--	0.5	--	754	246
08/09/66	5000				3.69	1.23	6.70	.11		2.79	5.37	3.44	.15				721	107
					31	10	57	1		24	45	29	1					

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER DATE LAB TIME SAMPLER	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER				MILLIEQUIVALENT PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER			TDS SUM	TH NCH
				CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2		
SAN JOAQUIN COUNTY	5 22.01																
02S/06E-30M01 M 06/09/66 5000 1500	--	8.3	1010	65 3.24 33	9.2 .76 8	128 5.57 57	5.0 .13 1	0.0	157 2.57 26	200 4.16 42	108 3.05 31	4.5 .07 1	--	0.5	--	619 597	200 72
03S/05E-05E 1 06/09/66 5000 1030	--	8.3	1240	101 5.04 42	11 .90 8	136 5.92 50	3.0 .08 1	0.0	155 2.54 21	230 4.78 39	159 4.48 37	19 .31 3	--	0.7	--	781 736	299 172
LAHONTAN REGION	6 0.00																
SOUTH TAHOE VALLEY	6 5.01																
12N/18E-03A01 M 06/22/66	--	8.1	121	--	--	6.9 .30	--	0.0	64 1.05	--	4.6 .13	--	--	--	--	--	45 0
12N/18E-03C01 M 06/22/66	--	7.7	71	--	--	4.9 .21	--	0.0	40 .66	--	1.2 .03	--	--	--	--	--	26 0
12N/18E-03F01 M 06/22/66	--	8.1	96	--	--	5.4 .23	--	0.0	54 .89	--	1.3 .04	--	--	--	--	--	36 0
12N/18E-03J01 M 06/22/66	--	8.0	76	--	--	5.3 .23	--	0.0	45 .74	--	0.9 .03	--	--	--	--	--	28 0
12N/18E-05L01 M 06/22/66	--	8.0	104	--	--	6.4 .27	--	0.0	59 .97	--	1.2 .03	--	--	--	--	--	40 0
12N/18E-05P11 M 06/22/66	--	7.9	80	--	--	5.5 .24	--	0.0	47 .77	--	1.0 .03	--	--	--	--	--	26 0
12N/18E-29L01 1 06/22/66	--	7.7	85	--	--	8.1 .35	--	0.0	46 .75	--	1.5 .04	--	--	--	--	--	24 0

TABLE E 1
MINERAL ANALYSIS OF GROUND WATER

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MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME	LAB / SAMPLER	TEMP	PH LAB / FLD	EC LAB / FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
SURPRISE VALLEY	6-1.00																		
39N/17E-05D01 M		--	7.8	384		8.1	3.6	62	2.1	0.0	84	73	17	0.4	--	0.6	--	274	35
08/30/66 5050						.40	.30	2.70	.05		1.38	1.52	.48	.01				208	0
						12	9	78	1		41	45	14						
40N/16E-11G01 M		--	7.4	210		24	5.4	13	1.3	0.0	130	3.1	0.8	1.9	--	0.1	--	135	82
08/30/66 5050						1.20	.44	.57	.03		2.13	.06	.02	.03				113	0
						54	20	25	1		95	3	1	1					
40N/16E-13R01 M		--	--	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/30/66				217															
40N/16E-36F01 M		--	--	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/30/66				317															
41N/16E-25C03 M		--	8.4	227		5.4	1.1	43	0.4	2.0	90	23	5.7	0.2	--	0.3	--	152	18
08/30/66 5050						.27	.09	1.87	.01	.07	1.48	.48	.16					125	0
						12	4	83		3	68	22	7						
41N/16E-35D02 M		--	8.0	138		16	3.6	6.2	0.6	0.0	84	2.0	0.8	0.6	--	0.1	--	92	55
08/30/66 5050						.80	.30	.27	.02		1.38	.04	.02	.01				71	0
						58	22	19	1		95	3	1	1					
42N/16E-06R02 M		--	8.3	258		31	8.1	12	0.8	0.0	148	9.5	1.7	0.9	--	0.0	--	158	111
08/30/66 5050						1.55	.67	.52	.02		2.43	.20	.05	.01				137	0
						56	24	19	1		90	7	2						
42N/16E-21L01 M		--	--	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/30/66				227															
42N/16E-34F01 M		--	--	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/30/66				331															
43N/16E-20B01 M		--	--	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/30/66				259															
43N/16E-33M03 M		--	8.2	433		46	11	28	0.6	0.0	232	9.0	4.3	24	--	0.0	--	243	160
08/30/66 5050						2.30	.90	1.22	.02		3.80	.19	.12	.39				237	0
						52	20	27			84	4	3	9					
44N/16E-06E02 M		--	8.3	672		3.4	0.6	146	0.3	0.0	272	1.5	73	1.3	--	5.5	--	450	11
08/30/66 5050						.17	.05	6.35	.01		4.46	.03	2.06	.02				365	0
						3	1	97			68		31						

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE COLLECTED / TIME / SAMPLER		TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
SURPRISE VALLEY	6-1.00																	
44N/16E-29N01		--	8.1	311	0.9	1.7	73	1.3	0.0	193	2.8	0.9	4.8	--	0.2	--	241	9
08/30/66 5050					.04	.14	3.14	.03		3.17	.06	.03	.08				180	0
					1	4	94	1		95	2	1	2					
45N/16E-17D01 M		--	--	--	--	--	--	--	--	--	--	--	1.0	--	--	--	--	--
08/30/66 5050				279									.02					
45N/16E-19J01 M		--	--	--	--	--	--	--	--	--	--	--	--	--	0.2	--	--	--
08/30/66 5050				294														
46N/16E-13C01 M		--	8.3	506	38	15	45	2.5	0.0	277	23	10	0.6	--	0.4	--	303	156
08/30/66 5050					1.90	1.23	1.96	.06		4.54	.48	.28	.01				270	0
					37	24	38	1		85	9	5						
46N/16E-14R01 M		--	8.3	251	22	6.6	18	3.7	0.0	118	16	9.2	1.1	--	0.1	--	182	82
08/30/66 5050					1.10	.54	.78	.09		1.94	.33	.26	.02				135	0
					44	22	31	4		76	13	10	1					
46N/16E-29E01 M		--	--	--	--	--	--	--	--	--	--	--	--	--	0.7	--	--	--
08/30/66				518														
MADELINE PLAINS	6-2.00																	
34N/14E-23F01 M		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/22/66				265														
35N/14E-15N01 M		--	7.3	253	20	12	12	4.6	0.0	132	0.5	3.7	4.7	--	0.1	--	156	100
08/22/66 5050					1.00	.99	.52	.12		2.16	.01	.10	.08				122	0
					38	38	20	5		92		4	3					
35N/16E-19F01 M		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/22/66 5050				342														
WILLOW CREEK VALLEY	6-3.00																	
31N/12E-13M01 M		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/23/66				202														
31N/12E-25G01 M		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME	LAB / SAMPLER	TEMP	PH LAB	PH FLD	EC LAB	EC FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
HONEY LAKE VALLEY	6-4.00																				
22N/17E-04K01 M		59 F	7.9		297		MG/L	26	7.5	22	--	0.0	162	--	5.8	--	--	--	--	--	96
07/05/66	5050				283		MEQ/L	1.30	.62	.96			2.66		.16						0
25N/17E-21N03 M		--	--		--		MG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/24/66					295		MEQ/L														
26N/15E-03F01 M		--	--		--		MG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/24/66					217		MEQ/L														
26N/16E-15E01 M		--	8.2		548		MG/L	38	10	69	1.5	0.0	204	73	20	4.1	--	0.3	--	317	136
08/24/66	5050						MEQ/L	1.90	.82	2.61	.04		3.35	1.52	.56	.07				307	0
							PCT	35	15	49	1		61	28	10	1					
27N/14E-06C01 M		--	7.6		361		MG/L	47	8.5	12	4.0	0.0	162	5.3	14	16	--	0.0	--	226	152
08/24/66	5050						MEQ/L	2.35	.70	.52	.10		2.66	.11	.39	.26				186	19
							PCT	64	19	14	3		78	3	11	8					
27N/14E-26E01 M		--	--		--		MG/L	--	--	--	--	--	--	--	--	14	--	0.0	--	--	--
08/24/66					194		MEQ/L									.23					
28N/13E-09E01 M		--	--		--		MG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/23/66					217		MEQ/L														
28N/14E-02G01 M		--	--		--		MG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/23/66					1219		MEQ/L														
28N/14E-17H01 M		--	8.0		528		MG/L	41	13	54	1.3	0.0	299	12	6.7	11	--	0.1	--	310	157
08/23/66	5050						MEQ/L	2.05	1.07	2.35	.03		4.90	.25	.19	.18				286	0
							PCT	37	19	43	1		89	5	3	3					
28N/17E-18K01 M		--	--		--		MG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/24/66					266		MEQ/L														
28N/17E-20J01 M		--	--		--		MG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/24/66					273		MEQ/L														
29N/12E-04G01 M		--	--		--		MG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/25/66					720		MEQ/L														

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME	LAB / SAMPLER	TEMP	PH LAB	PH FLD	EC LAB	EC FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
HONEY LAKE VALLEY	6-4.00																			
29N/12E-15A01 M		--		7.5	207		30	2.9	14	--	0.0	123	--	3.8	--	--	--	--	--	87
08/24/66							1.50	.24	.61			2.02		.11						0
29N/13E-01N01 M		--		--	628		--	--	--	--	--	--	--	--	--	0.5	0.7	--	--	--
08/23/66																				
29N/13E-06K01 M		--		--	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/25/66					256															
29N/13E-14G01 M		--		--	--		--	--	--	--	--	--	--	--	72	--	--	--	--	--
08/23/66					576										1.16					
29N/14E-04N01 M		--		--	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/23/66					870															
29N/14E-10E01 M		--		7.9	891		18	5.6	170	2.4	0.0	273	161	25	6.9	--	0.4	--	597	68
08/23/66	5050						.90	.46	7.40	.06		4.48	3.35	.71	.11				523	0
							10	5	84	1		52	39	8	1					
29N/14E-18R01 M		--		--	--		--	--	--	--	--	--	--	--	--	--	1.1	--	--	--
08/23/66					1175															
29N/14E-19A02 M		--		8.6	1911		26	11	408	0.2	18	445	430	40	102	--	2.0	--	1280	112
08/23/66	5050						1.30	.90	17.75	.01	.60	7.30	8.94	1.13	1.64				1255	0
							7	5	89		3	37	46	6	8					
29N/15E-21N01 M		--		--	--		--	--	--	--	--	--	--	--	23	0.4	0.4	--	--	--
08/24/66					896										.37					
29N/15E-30A02 M		--		--	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/24/66					589															
29N/16E-30L01 M		--		--	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/24/66					323															
30N/12E-33N02 M		--		8.3	190		17	8.4	6.6	2.0	0.0	113	0.0	1.2	0.0	--	0.1	--	96	77
08/25/66	5050						.85	.69	.29	.05		1.85		.03					91	0
							45	37	15	3		98		2						

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME	LAB / SAMPLER	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	MILLIGRAMS PER LITER: F	B	SIO2	TDS SUM	TH NCH
NORTH TAHOE VALLEY		6 5.02																
16N/16E-28E01 M		--	6.5	282	--	--	8.5	--	0.0	0.0	--	2.2	--	--	--	--	--	90
06/23/66							.37					.06						90
16N/16E-32D01 M		--	8.2	204	--	--	5.[illegible]	--	0.0	76	--	3.7	--	--	--	--	--	90
06/23/66							.25			1.25		.10						28
16N/16E-32D02 M		--	7.1	110	--	--	3.5	--	0.0	45	--	1.0	--	--	--	--	--	50
06/23/66							.15			.74		.03						13
16N/17E-13H01 M		--	7.1	114	--	--	3.7	--	0.0	64	--	1.6	--	--	--	--	--	51
06/23/66							.16			1.05		.05						0
16N/17E-14H01 M		--	8.2	265	--	--	11	--	0.0	147	--	5.5	--	--	--	--	--	109
06/23/66							.48			2.41		.16						0
16N/17E-14C01 M		--	8.4	274	--	--	11	--	4.0	164	--	5.6	--	--	--	--	--	123
06/23/66							.48		.13	2.69		.16						0
15N/16E-24A01 M		--	7.9	164	--	--	4.1	--	0.0	95	--	2.7	--	--	--	--	--	75
06/23/66							.18			1.56		.08						0
15N/17E-07E01 M		--	7.5	119	--	--	5.5	--	0.0	46	--	3.7	--	--	--	--	--	46
06/23/66							.24			.75		.25						9
14N/16E-01C01 M		--	7.5	41	--	--	2.6	--	0.0	25	--	0.9	--	--	--	--	--	16
06/23/66							.11			.41		.03						0
14N/16E-01K01 M		--	7.1	49	--	--	2.1	--	0.0	29	--	0.0	--	--	--	--	--	20
06/23/66							.09			.48								0

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME	LAB / SAMPLER	TEMP	PH LAB	PH FLD	EC LAB	EC FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	TDS SUM	TH NCH
CARSON VALLEY	6 6.00																				
11N/19E-35D02 M		--	7.0		121			--	--	8.4	--	0.0	64	--	1.0	--	--	--	--	--	41
06/21/66										.37			1.05		.03						0
11N/19E-35K01 M		--	6.6		96			--	--	6.1	--	0.0	56	--	[illegible]	--	--	--	--	--	37
06/21/66										.27			.92		.03						0
11N/20E-07M01 M		--	8.0		150			--	--	7.4	--	0.0	49	--	4.7	--	--	--	--	--	53
06/21/66										.32			.80		.13						13
TOPAZ VALLEY	6 7.00																				
09N/22E-24D01 M		--	8.2		149			--	--	14	--	0.0	107	--	3.0	--	--	--	--	--	51
06/21/66										.61			1.75		.08						0
													1								
09N/22E-24M01 M		--	8.3		224			--	--	17	--	0.0	114	--	4.7	--	--	--	--	--	75
06/26/66										.74			1.87		.10						0
09N/23E-20P01 M		--	8.3		295			--	--	17	--	0.0	180	--	2.1	--	--	--	--	--	122
06/21/66										.74			2.95		.06						0
													1								
09N/23E-30C02 M		--	8.3		339			--	--	53	--	0.0	90	--	38	--	--	--	--	--	45
06/21/66										2.31			1.48		1.07						0
08N/23E-16P01 M		--	8.5		253			--	--	24	--	4.0	138	--	3.3	--	--	--	--	--	84
06/21/66										1.04		.13	2.26		.09						0
08N/23E-28E03 M		--	8.2		295			--	--	38	--	0.0	78	--	15	--	--	--	--	--	56
06/21/66										1.65			1.28		.42						0
08N/23E-29C02 M		--	8.0		122			--	--	8.7	--	0.0	54	--	1.8	--	--	--	--	--	45
06/21/66										.38			1.05		.05						0

TABLE E 1

MINERAL ANALYSIS OF GROUND WATER

STATE WELL NUMBER / DATE / TIME	LAB / SAMPLER	TEMP	PH LAB	PH FLD	EC LAB	EC FLD	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENT PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SIO2	MILLIGRAMS PER LITER TDS SUM	TH NCH
BRIDGEPORT VALLEY		6 8.00																		
05N/24E-25G01 M 06/21/66		--	8.1		129		--	--	6.2 .27	--	0.0	71 1.16	--	9.4 .27	--	--	--	--	--	52 0
05N/25E-28K01 M 06/21/66		--	8.7		500		--	--	34 1.65	--	16 .53	234 3.84	--	6.7 .19	--	--	--	--	--	175 0
05N/25E-28Q01 M 06/21/66		--	8.5		288		--	--	24 1.04	--	4.0 .13	138 2.26	--	8.2 .23	--	--	--	--	--	85 0
04N/24E-13E01 M 06/20/66		--	7.7		108		--	--	5.2 .23	--	0.0	54 .89	--	1.2 .03	--	--	--	--	--	43 0
04N/25E-04K01 M 06/21/66		--	8.4		325		--	--	26 1.13	--	2.0 .07	179 2.94	--	4.2 .12	--	--	--	--	--	107 0
04N/25E-04P01 M 06/21/66		--	9.1		2760		--	--	587 25.53	--	96 3.20	606 9.94	--	136 3.84	--	--	--	--	--	128 0
TRUCKEE VALLEY		6 67.00																		
17N/16E-08M01 M 06/23/66		--	7.6		447		--	--	63 2.74	--	0.0	152 2.49	--	45 1.27	--	--	--	--	--	38 0
17N/16E-14F01 M 06/23/66		--	8.1		130		--	--	3.7 .16	--	0.0	80 1.31 1	--	1.2 .03	--	--	--	--	--	64 0
17N/16E-16L01 M 06/23/66		--	8.2		159		--	--	5.2 .23	--	0.0	78 1.28	--	8.9 .25	--	--	--	--	--	65 1
17N/16E-17F01 M 06/23/66		--	8.0		205		--	--	7.6 .33	--	0.0	66 1.08	--	27 .76	--	--	--	--	--	76 22

TABLE E-2

TRACE ELEMENT ANALYSES OF GROUND WATER

NORTHEASTERN CALIFORNIA

State Well Number	Date	Constituents in parts per million						
		Al	As	Cu	Fe (Total)	Pb	Mn	Zn
Surprise Valley (6-1.00)								
41N-16E-25C3	8-30-66		0.02					
41N-16E-35D2	8-30-66		0.00					
42N-16E-6R2	8-30-66		0.00					
42N-16E-34F1	8-30-66		0.00					
43N-16E-20B1	8-30-66		0.00					
43N-16E-33M3	8-30-66		0.00					
44N-16E-6E2	8-30-66		0.01					
44N-16E-29N1	8-30-66		0.01		0.08			
45N-16E-17D1	8-30-66		0.00		0.03			
45N-16E-19Q1	8-30-66		0.01		0.05	0.01		
46N-16E-13C1	8-30-66		0.00					
46N-16E-14R1	8-30-66		0.01'					
46N-16E-29E1	8-30-66		0.00				0.01	
Madeline Plains (6-2.00)								
35N-16E-19F1	8-22-66	0.46	0.00	0.00	0.23	0.00	0.12	0.00
Honey Lake Valley (6-4.00)								
22N-17E-4K1	7.5-66		0.00					
26N-16E-15E1	8-24-66		0.01				0.00	
27N-14E-26E1	8-24-66		0.00			0.00	0.00	
28N-14E-17B1	8-23-66		0.01			0.00		
29N-12E-4G1	8-25-66		0.02				0.05	
29N-13E-1N1	8-23-66		0.07					

TABLE E-2

TRACE ELEMENT ANALYSES OF GROUND WATER

NORTHEASTERN CALIFORNIA

State Well Number	Date	Constituents in parts per million						
		Al	As	Cu	Fe (Total)	Pb	Mn	Zn
Honey Lake Valley (6- 4.00)								
29N-13E-14G1	8-23-66		0.03					
29N-14E-4N1	8-23-66		0.02					
29N-14E-18R1	8-23-66		0.35					
29N-14E-19A2	8-23-66		0.12				0.00	
29N-15E-21N1	8-24-66		0.00				0.07	
29N-15E-30A2	8-24-66		0.00				0.07	
30N-12E-33N2	8-25-66		0.00					
South Fork Pit River Valley (5-2.00)								
41N-11E-2J1	8-31-66	0.01	0.00	0.01	0.47	0.00	0.00	0.10
41N-13E-18P1	8-29-66		0.02		0.26	0.00		
42N-13E-32G1	8-29-66		0.01			0.00		
Big Valley (5-4.00)								
37N-7E-13B1	8-4-66		0.00				0.00	
38N-7E-23D1	8-4-66		0.00		0.30	0.00	0.37	
38N-8E-30R1	8-4-66		0.00					
Fall River Valley (5-5.00)								
37N-5E-1C1	8-3-66		0.00				0.01	
37N-5E-14R1	8-3-66		0.00				0.01	
37N-5E-24F1	8-3-66		0.00				0.00	
37N-6E-19L1	8-3-66		0.00					
37N-6E-29B1	8-3-66		0.00				0.02	
38N-3W-24F1	8-3-66		0.00				0.01	

TABLE E-2

TRACE ELEMENT ANALYSES OF GROUND WATER

NORTHEASTERN CALIFORNIA

State Well Number	Date	Constituents in parts per million						
		Al	As	Cu	Fe (Total)	Pb	Mn	Zn
Sacramento Valley								
Redding Basin (5-6.00)								
31N-4W-7A1	7-27-66		0.00					
31N-5W-25K1	7-26-66	0.01	0.00	0.00	0.09	0.00	0.18	0.02
32N-3W-17E2	7-26-66	0.00	0.01	0.02	0.77	0.00	0.00	0.05
32N-3W-20P1	7-26-66	0.03	0.00	0.02	0.48	0.01	0.09	
32N-4W-14F2	7-26-66		0.00		3.9			
32N-4W-16B2	7-26-66							0.22
Glenn County (5-21.01)								
22N-3W-22Q1	7-6-66	0.00	0.00	0.00	0.02	0.00	0.00	0.00
Colusa County (5-21.04)								
13N-1W-36Q2	9-27-66		0.00					
14N-1W-2D1	9-27-66		0.00					
14N-1W-12A1	9-27-66		0.00					
15N-2W-32R1	9-27-66		0.00					
16N-2W-25B2	9-27-66		0.01					
16N-2W-35B1	9-27-66		0.00			0.00		
16N-3W-9N1	9-27-66		0.00					
17N-1W-6R1	9-27-66		0.01					
17N-2W-12C1	9-27-66		0.00					